

#2

Access DB# 181905

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Sin J. Lee Examiner #: 76060 Date: 3/7/2006
Art Unit: 1752 Phone Number 302-1333 Serial Number: 10/800,195
Mail Box and Bldg/Room Location: 9D60 Results Format Preferred (circle): PAPER DISK E-MAIL
Rem-

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: P12. See Bib.

SCIENTIFIC REFERENCE BR
Sci & Tech Inf. Ctr

Inventors (please provide full names):

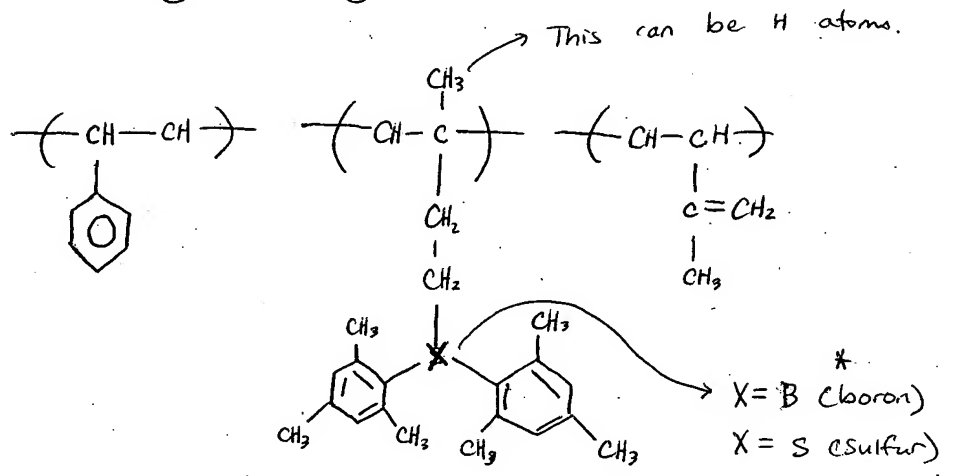
MAR 10 RECD

Earliest Priority Filing Date:

Pat. & T.M. Office

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search for a polymer having all of the following repeating units:



STAFF USE ONLY		Type of Search	Vendors and cost where applicable
Searcher: <u>SN</u>	NA Sequence (#)	STN	
Searcher Phone #:	AA Sequence (#)	Dialog	
Searcher Location:	Structure (#)	Questel/Orbit	
Date Searcher Picked Up:	Bibliographic	Dr. Link	
Date Completed: <u>3-14-06</u>	Litigation	Lexis/Nexis	
Searcher Prep & Review Time:	Fulltext	Sequence Systems	
Clerical Prep Time:	Patent Family	WWW/Internet	
Online Time:	Other	Other (specify)	



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Bib Data Sheet

CONFIRMATION NO. 8744

SERIAL NUMBER 10/800,195	FILING DATE 03/12/2004 RULE	CLASS 430	GROUP ART UNIT 1752	ATTORNEY DOCKET NO. 5347.218
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APPLICANTS

Junyan Dai, Ithaca, NY;
Christopher K. Ober, Ithaca, NY;
Lin Wang, Baton Rouge, LA; Franco Cerrina, Madison, WI;
Paul Nealey, Madison, WI;

** CONTINUING DATA *****
 This appln claims benefit of 60/454,062 03/12/2003
 SJL

** FOREIGN APPLICATIONS *****
 None SJL

IF REQUIRED, FOREIGN FILING LICENSE GRANTED
 ** 05/28/2004

Foreign Priority claimed 35 USC 119 (a-d) conditions met Verified and Acknowledged	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance <u>SJL</u> Examiner's Signature Initials	STATE OR COUNTRY NY	SHEETS DRAWING 10	TOTAL CLAIMS 64	INDEPENDENT CLAIMS 8
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ADDRESS
 20792
 MYERS BIGEL SIBLEY & SAJOVEC
 PO BOX 37428
 RALEIGH, NC
 27627

TITLE
 Organoelement resists for EUV lithography and methods of making the same

FILING FEE	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT	<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time)
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FILE 'LREGISTRY' ENTERED AT 11:43:34 ON 14 MAR 2006

L1 STR
L2 STR
L3 STR

FILE 'REGISTRY' ENTERED AT 11:49:03 ON 14 MAR 2006

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L6 STR L1
L7 0 S L6 AND L2 AND L3 AND L4
L8 STR L6
L9 0 S L8 AND L2 AND L3 AND L4

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L11 1058 S OBER ?/AU
L12 184 S NEALEY ?/AU
L13 385246 S WANG ?/AU
L14 3 S L10 AND L11 AND L12 AND L13
SEL L14 1-3 RN

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L17 12 S L15 AND B/ELS
L18 12 S L15 AND PMS/CI
L19 1 S L18 AND L17
L20 50 S L2 AND L4
L21 1402 S L2 AND L4 FUL
SAV L21 LEE195A/A
L22 19 S (L8 OR L3) SSS SAM SUB=L21
L23 10 S (L1 OR L3) SSS SAM SUB=L21
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L25 36 S L1 AND L3 SSS FUL SUB=L21
SAV L25 LEE195B/A

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L26 STR L2

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L29 6 S L27 AND (L1 OR L3) SSS SAM SUB=L21

L30 STR L27

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SAV L32 LEE195C/A

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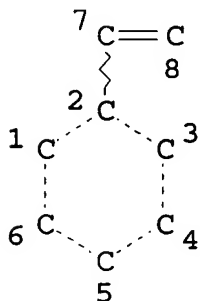
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L35 18 S L33 OR L34

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DEFAULT ECLEVEL IS LIMITED

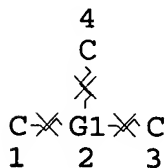
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NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L2 STR



VAR G1=B/S

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NSPEC IS RC AT 3

NSPEC IS RC AT 4

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE

L3 STR

C=C~C=C
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NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

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NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE

L4 SCR 2043

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L25 36 SEA FILE=REGISTRY SUB=L21 SSS FUL L1 AND L3

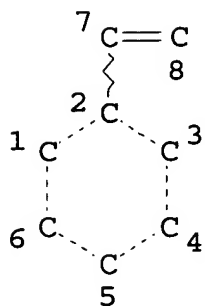
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36 ANSWERS

SEARCH TIME: 00.00.01

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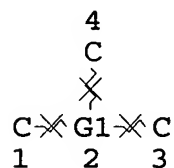
L1 STR



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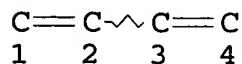
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 NSPEC IS RC AT 1
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 NSPEC IS RC AT 4
 DEFAULT MLEVEL IS ATOM
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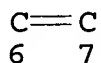


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NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE
L4 SCR 2043
L21 1402 SEA FILE=REGISTRY SSS FUL L2 AND L4
L30 STR



Cb \wedge G1 \wedge Cb
1 2 3

VAR G1=B/S
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
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DEFAULT ECLEVEL IS LIMITED

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STEREO ATTRIBUTES: NONE
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100.0% PROCESSED 417 ITERATIONS 51 ANSWERS
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=> d 135 1-18 cbib abs hitstr hitrn

L35 ANSWER 1 OF 18 ZCA COPYRIGHT 2006 ACS on STN

144:89234 Disperse amphiphilic submicron particles as non-covalent supports for cationic homogeneous catalysts. Sablong, Rafael; van der Vlugt, Jarl Ivar; Thomann, Ralf; Mecking, Stefan; Vogt, Dieter (Schuit Institute of Catalysis, Laboratory of Homogeneous Catalysis, Eindhoven University of Technology, Eindhoven, 5600, Neth.). Advanced Synthesis & Catalysis, 347(5), 633-636 (English) 2005. CODEN: ASCAF7. ISSN: 1615-4150. Publisher: Wiley-VCH Verlag GmbH & Co. KGaA.

AB A simple method for the effective immobilization of homogeneous catalysts on polystyrene colloids via non-covalent binding is demonstrated. Stable latices with sufficiently high loading of accessible borate anions are prepd. via emulsion polymn. Incorporation of cationic rhodium complexes, supported via their borate counter-anion is efficient, and these supported homogeneous catalysts maintain const. catalytic activity for C:C hydrogenation during several recycles, with very low metal leaching.

IT 872554-37-5P

(catalyst support; disperse amphiphilic submicron particles as non-covalent supports for cationic homogeneous catalysts)

RN 872554-37-5 ZCA

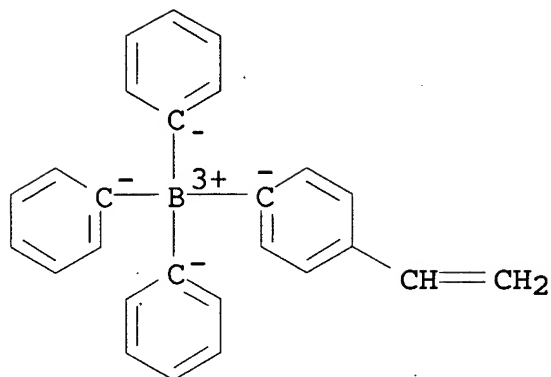
CN Borate(1-), (4-ethenylphenyl)triphenyl-, sodium, (T-4)-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 99697-50-4

CMF C26 H22 B . Na

CCI CCS



● Na⁺

CM 2

CRN 100-42-5

CMF C8 H8

H₂C=CH-Ph

IT 872554-37-5P

(catalyst support; disperse amphiphilic submicron particles as non-covalent supports for cationic homogeneous catalysts)

L35 ANSWER 2 OF 18 ZCA COPYRIGHT 2006 ACS on STN.

143:98162 Boron-containing polymer compound and organic light emitting device using the same. Kato, Tsuyoshi; Kondo, Kunio (Showa Denko K.K., Japan). PCT Int. Appl. WO 2005061562 A1 (2005) 0707, 78 pp.

DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IS, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR.

(English). CODEN: PIXXD2. APPLICATION: WO 2004-JP18859 20041210.

PRIORITY: JP 2003-422040 20031219; US 2003-2003/PV532919 20031230.

AB The present invention provides a polymer material showing high luminous efficiency at a low voltage and suitable for increasing the

emission area and for the mass prodn., and an org. light emitting device using the same. The present invention relates to a polymer compd. comprising a boron-contg. monomer unit represented by [CR16(XA)CH2]: where A represents a tri-Ph boron group in which the Ph group may be substituted, R16 represents a hydrogen atom or an alkyl group having 1 to 12 carbon atoms, X represents a single bond, -O-, -S-, -SO-, -SO2- or a divalent hydrocarbon group having 1 to 20 carbon atoms which may have a hetero atom, a light-emitting polymer compd. comprising the boron-contg. monomer unit and a light-emitting monomer unit, a light-emitting compn. comprising the boron-contg. monomer unit and a light-emitting low-mol. compd. or light-emitting polymer compd., and org. light-emitting device using the light-emitting polymer compd. or the light-emitting compn.

IT 856695-41-5P 856695-42-6P 856695-43-7P

856695-44-8P 856695-45-9P 856695-46-0P

856695-47-1P 856695-48-2P 856695-49-3P

856695-50-6P 856695-51-7P 856695-52-8P

856695-53-9P 856695-55-1P 856695-56-2P

856695-58-4P 856695-59-5P 856695-60-8P

856695-61-9P 856695-62-0P 857061-54-2P

857061-55-3P 857061-56-4P 857061-57-5P

857061-58-6P 857061-59-7P 857061-60-0P

857061-61-1P 857061-62-2P 857061-63-3P

(boron-contg. polymer compd. and org. light emitting device using the same)

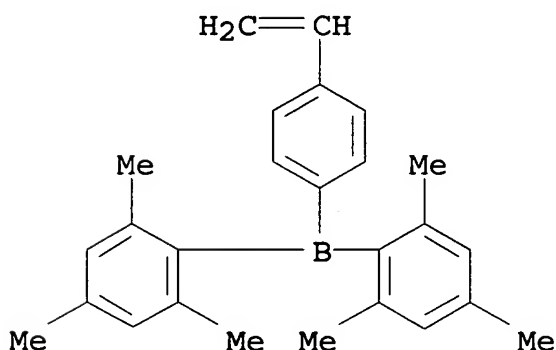
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CN Borane, (4-ethenylphenyl)bis(2,4,6-trimethylphenyl)-, homopolymer (9CI) (CA INDEX NAME)

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CRN 856695-21-1

CMF C26 H29 B



RN 856695-42-6 ZCA

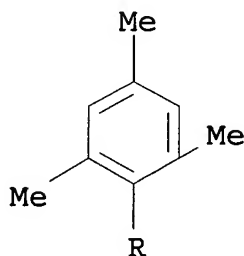
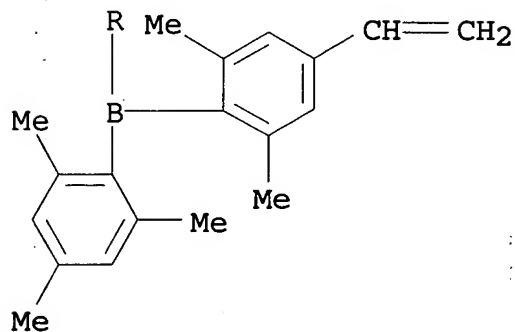
CN Borane, (4-ethenyl-2,6-dimethylphenyl)bis(2,4,6-trimethylphenyl)-,

homopolymer (9CI) (CA INDEX NAME)

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CRN 856695-22-2

CMF C28 H33 B



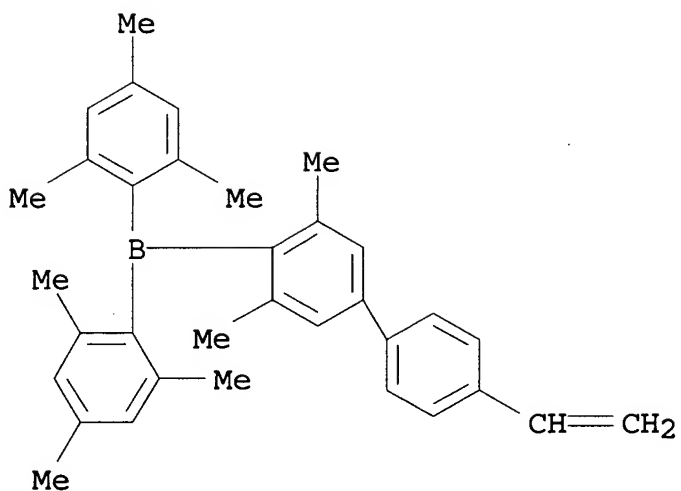
RN 856695-43-7 ZCA

CN Borane, (4'-ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)bis(2,4,6-trimethylphenyl)-, homopolymer (9CI) (CA INDEX NAME)

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CRN 856695-27-7

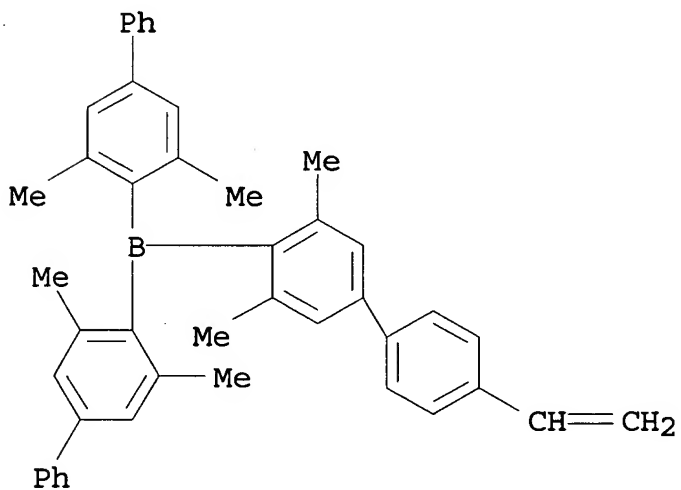
CMF C34 H37 B



RN 856695-44-8 ZCA
 CN Borane, bis(3,5-dimethyl[1,1'-biphenyl]-4-yl)(4'-ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 856695-28-8
 CMF C44 H41 B

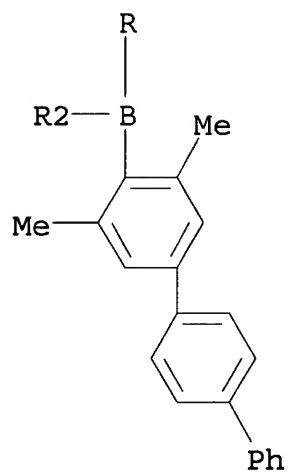


RN 856695-45-9 ZCA
 CN Borane, bis(3,5-dimethyl[1,1':4',1''-terphenyl]-4-yl)(4'-ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)-, homopolymer (9CI) (CA INDEX NAME)

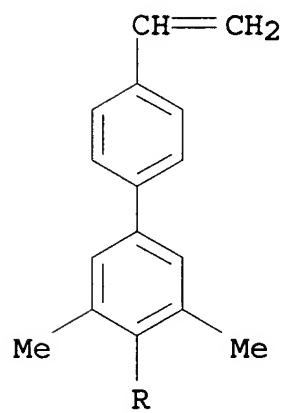
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CRN 856695-35-7
CMF C56 H49 B

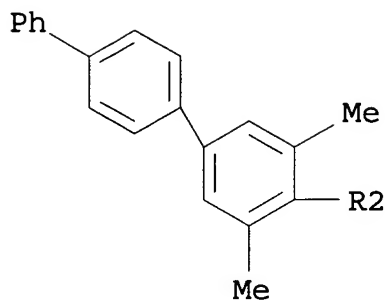
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PAGE 2-A



PAGE 3-A

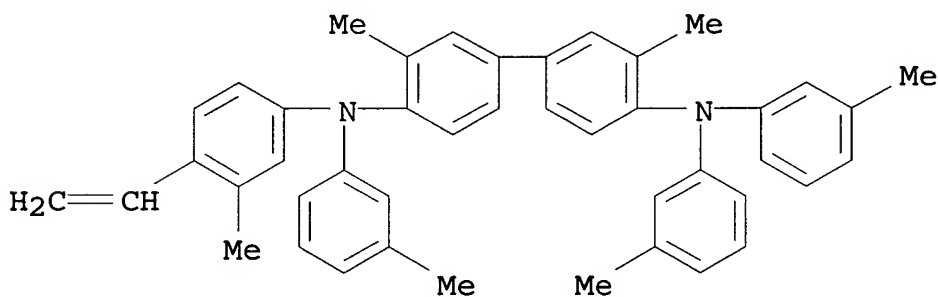


RN 856695-46-0 ZCA
CN [1,1'-Biphenyl]-4,4'-diamine, N-(4-ethenyl-3-methylphenyl)-3,3'-dimethyl-N,N',N'-tris(3-methylphenyl)-, polymer with (4-ethenylphenyl)bis(2,4,6-trimethylphenyl)borane (9CI) (CA INDEX NAME)

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CRN 856695-39-1

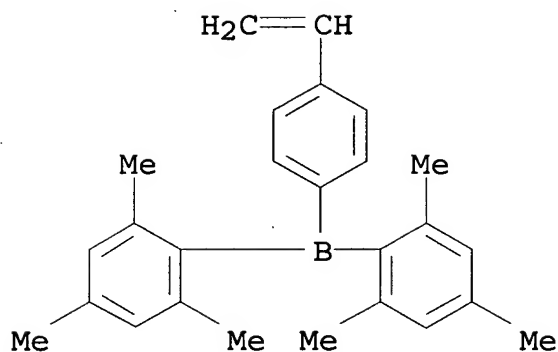
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CRN 856695-21-1

CMF C26 H29 B



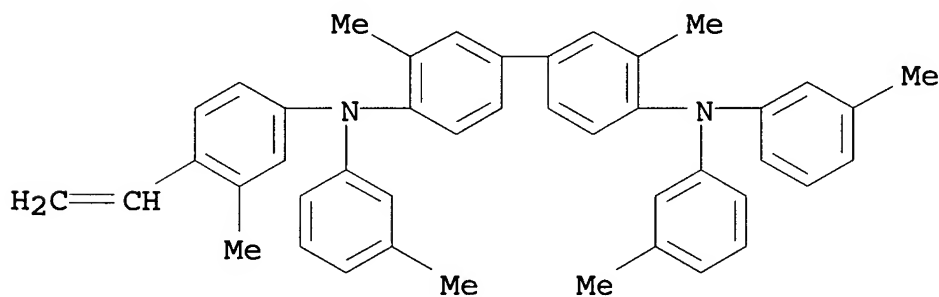
RN 856695-47-1 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N-(4-ethenyl-3-methylphenyl)-3,3'-dimethyl-N,N',N'-tris(3-methylphenyl)-, polymer with (4-ethenyl-2,6-dimethylphenyl)bis(2,4,6-trimethylphenyl)borane (9CI)
(CA INDEX NAME)

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CRN 856695-39-1

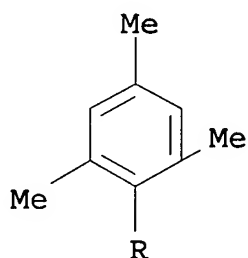
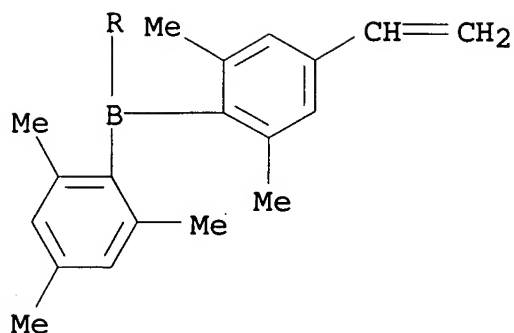
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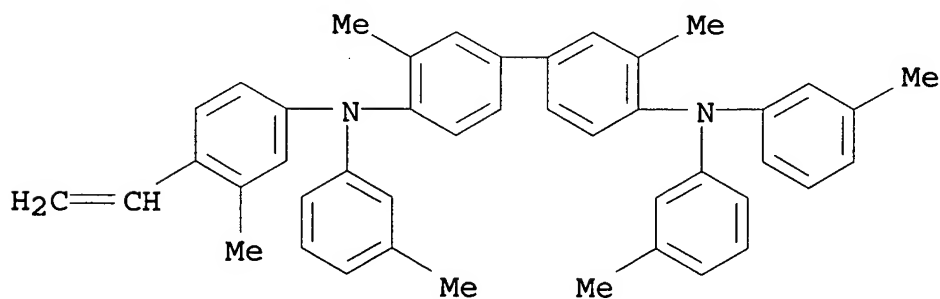
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RN 856695-48-2 ZCA
 CN [1,1'-Biphenyl]-4,4'-diamine, N-(4-ethenyl-3-methylphenyl)-3,3'-dimethyl-N,N',N'-tris(3-methylphenyl)-, polymer with (4'-ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)bis(2,4,6-trimethylphenyl)borane (9CI) (CA INDEX NAME)

CM 1

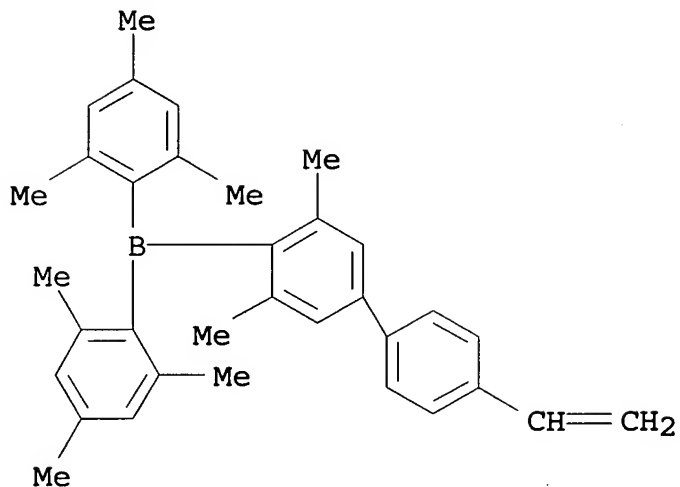
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CRN 856695-27-7

CMF C34 H37 B



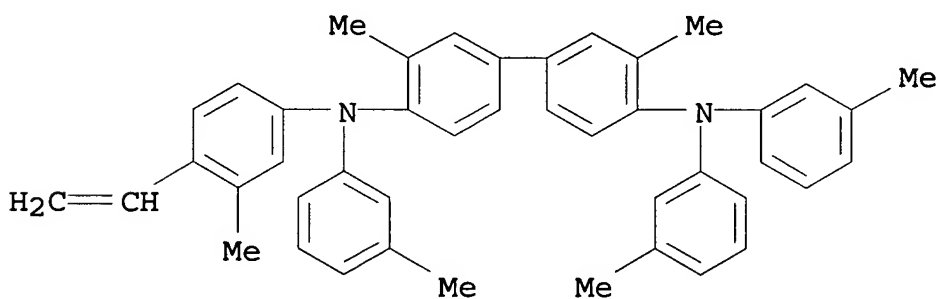
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CN [1,1'-Biphenyl]-4,4'-diamine, N-(4-ethenyl-3-methylphenyl)-3,3'-dimethyl-N,N',N'-tris(3-methylphenyl)-, polymer with bis(3,5-dimethyl[1,1'-biphenyl]-4-yl)(4'-ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)borane (9CI) (CA INDEX NAME)

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CRN 856695-39-1

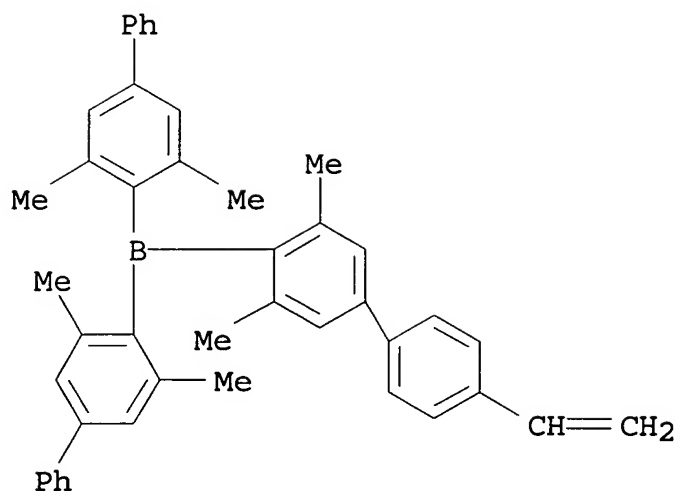
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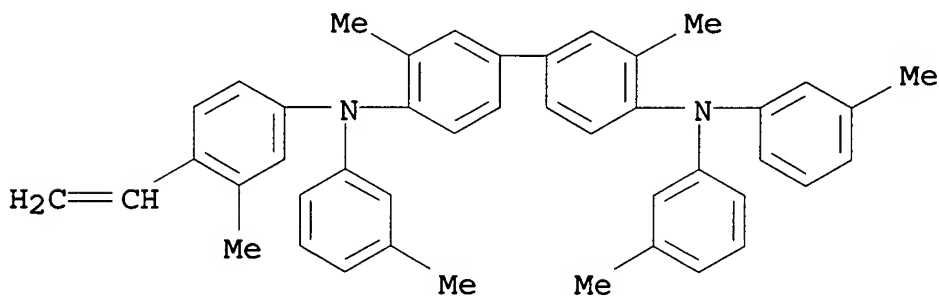
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CN [1,1'-Biphenyl]-4,4'-diamine, N-(4-ethenyl-3-methylphenyl)-3,3'-dimethyl-N,N',N'-tris(3-methylphenyl)-, polymer with bis(3,5-dimethyl[1,1':4',1''-terphenyl]-4-yl)(4'-ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)borane (9CI) (CA INDEX NAME)

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CRN 856695-39-1

CMF C44 H42 N2

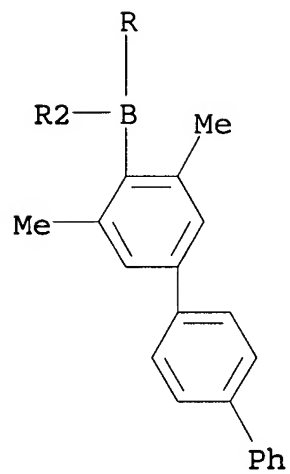


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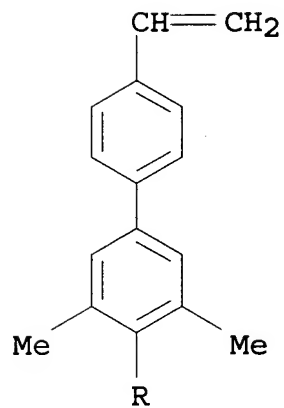
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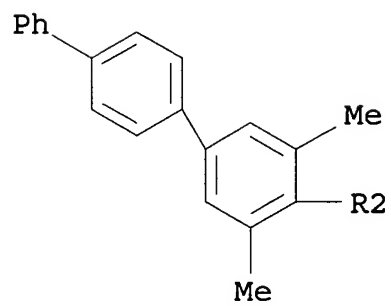
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PAGE 2-A



PAGE 3-A

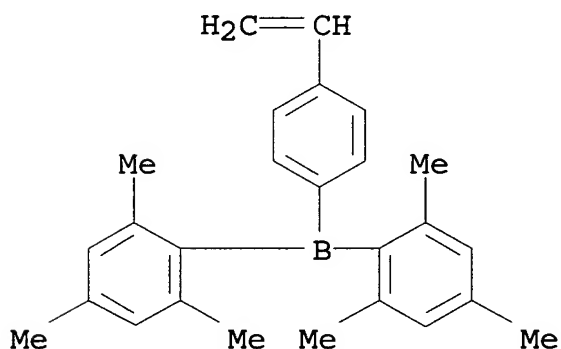


RN 856695-51-7 ZCA
 CN Iridium, [6-(4-ethenylphenyl)-2,4-hexanedionato-
 .kappa.O, .kappa.O']bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-,
 polymer with (4-ethenylphenyl)bis(2,4,6-trimethylphenyl)borane (9CI)
 (CA INDEX NAME)

CM 1

CRN 856695-21-1

CMF C26 H29 B

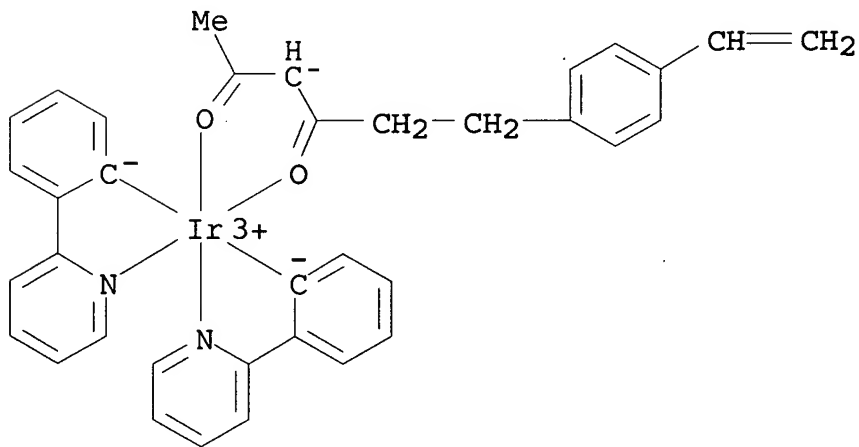


CM 2

CRN 481694-72-8

CMF C36 H31 Ir N2 O2

CCI CCS



RN 856695-52-8 ZCA

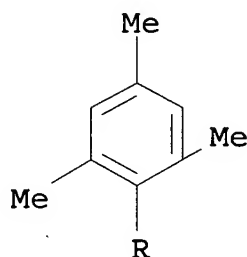
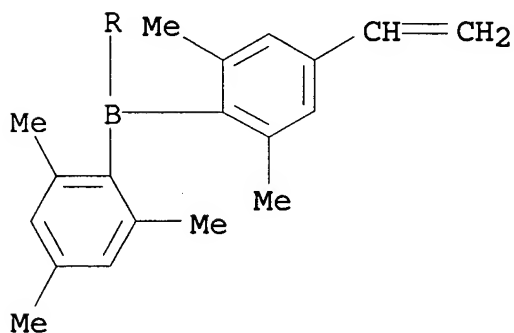
CN Iridium, [6-(4-ethenylphenyl)-2,4-hexanedionato-

.kappa.O, .kappa.O']bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C] -,
polymer with (4-ethenyl-2,6-dimethylphenyl)bis(2,4,6-
trimethylphenyl)borane (9CI) (CA INDEX NAME)

CM 1

CRN 856695-22-2

CMF C28 H33 B

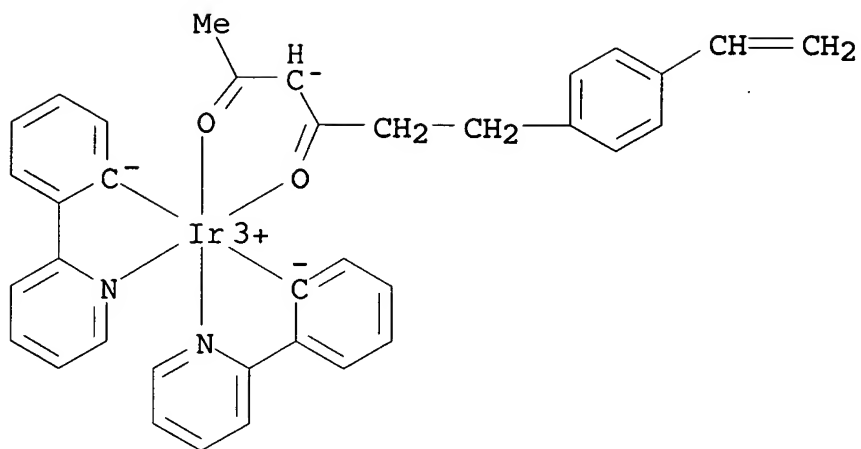


CM 2

CRN 481694-72-8

CMF C36 H31 Ir N2 O2

CCI CCS



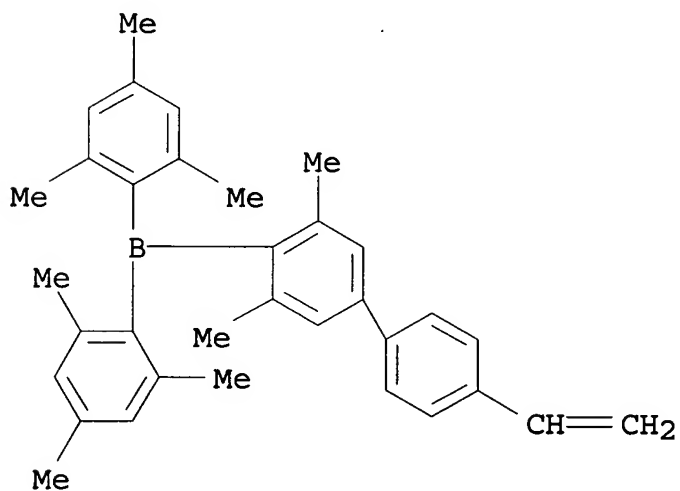
RN 856695-53-9 ZCA

CN Iridium, [6-(4-ethenylphenyl)-2,4-hexanedionato-
 .kappa.O, .kappa.O']bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-,
 polymer with (4'-ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)bis(2,4,6-
 trimethylphenyl)borane (9CI) (CA INDEX NAME)

CM 1

CRN 856695-27-7

CMF C34 H37 B

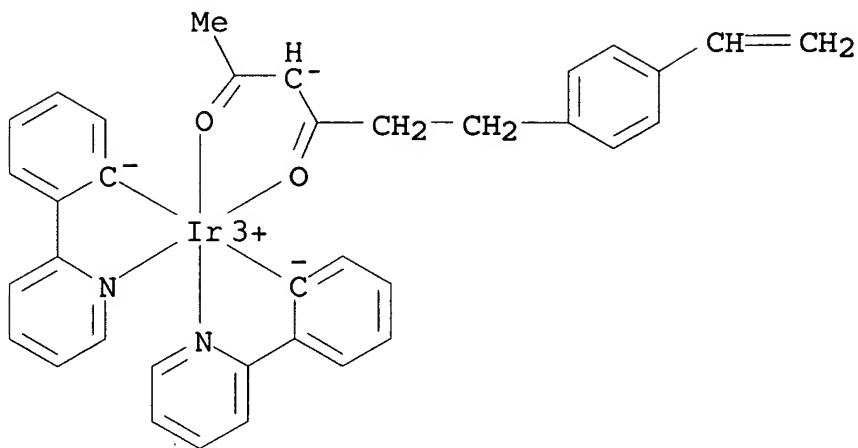


CM 2

CRN 481694-72-8

CMF C36 H31 Ir N2 O2

CCI CCS

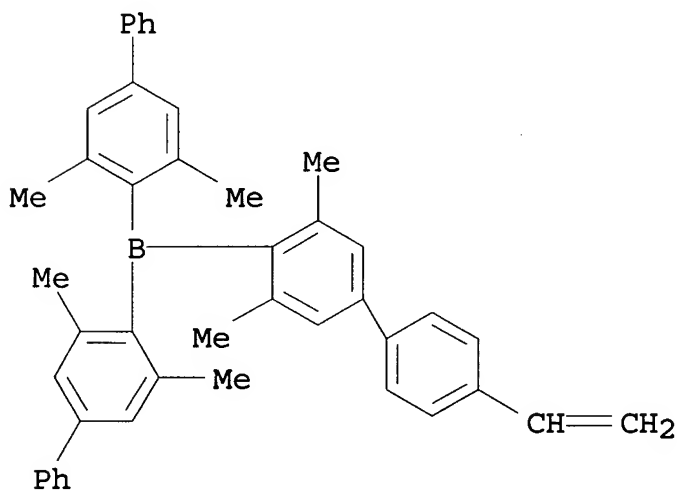


RN 856695-55-1 ZCA
 CN Iridium, [6-(4-ethenylphenyl)-2,4-hexanedionato-
 .kappa.O, .kappa.O']bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C] -,
 polymer with bis(3,5-dimethyl[1,1'-biphenyl]-4-yl)(4'-ethenyl-3,5-
 dimethyl[1,1'-biphenyl]-4-yl)borane (9CI) (CA INDEX NAME)

CM 1

CRN 856695-28-8

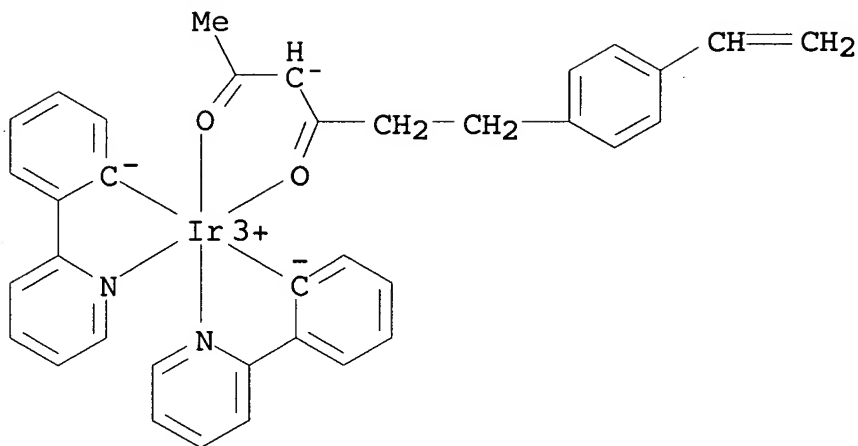
CMF C44 H41 B



CM 2

CRN 481694-72-8

CMF C36 H31 Ir N2 O2
CCI CCS

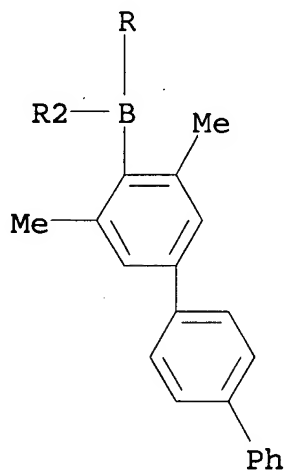


RN 856695-56-2 ZCA
CN Iridium, [6-(4-ethenylphenyl)-2,4-hexanedionato-
.kappa.O,.kappa.O']bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-,
polymer with bis(3,5-dimethyl[1,1':4',1''-terphenyl]-4-yl)(4'-
ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)borane (9CI) (CA INDEX
NAME)

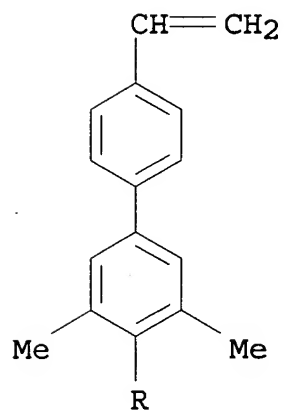
CM 1

CRN 856695-35-7
CMF C56 H49 B

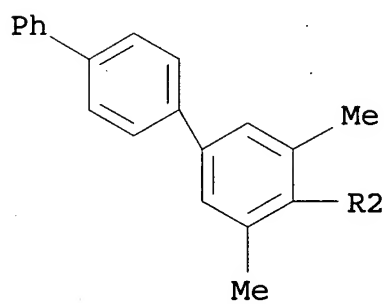
PAGE 1-A



PAGE 2-A



PAGE 3-A

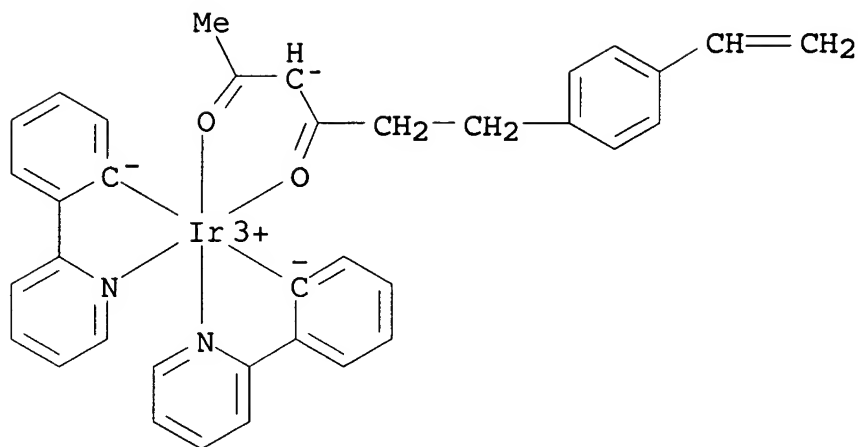


CM 2

CRN 481694-72-8

CMF C36 H31 Ir N2 O2

CCI CCS

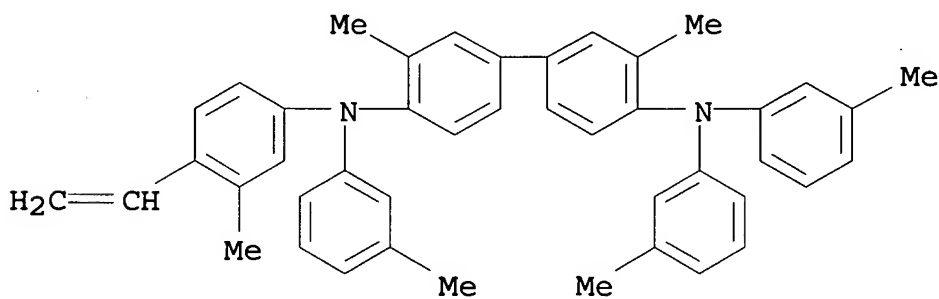


RN 856695-58-4 ZCA
 CN Iridium, [6-(4-ethenylphenyl)-2,4-hexanedionato-
 .kappa.O, .kappa.O']bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-,
 polymer with N-(4-ethenyl-3-methylphenyl)-3,3'-dimethyl-N,N',N'-
 tris(3-methylphenyl)[1,1'-biphenyl]-4,4'-diamine and
 (4-ethenylphenyl)bis(2,4,6-trimethylphenyl)borane (9CI) (CA INDEX
 NAME)

CM 1

CRN 856695-39-1

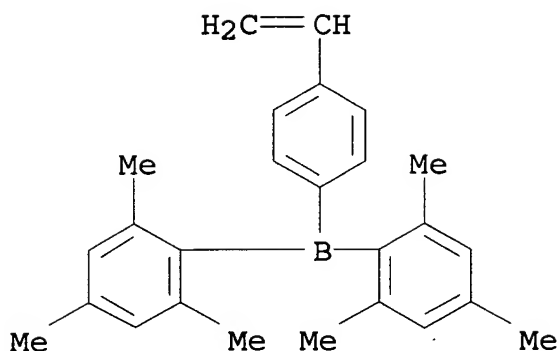
CMF C44 H42 N2



CM 2

CRN 856695-21-1

CMF C26 H29 B

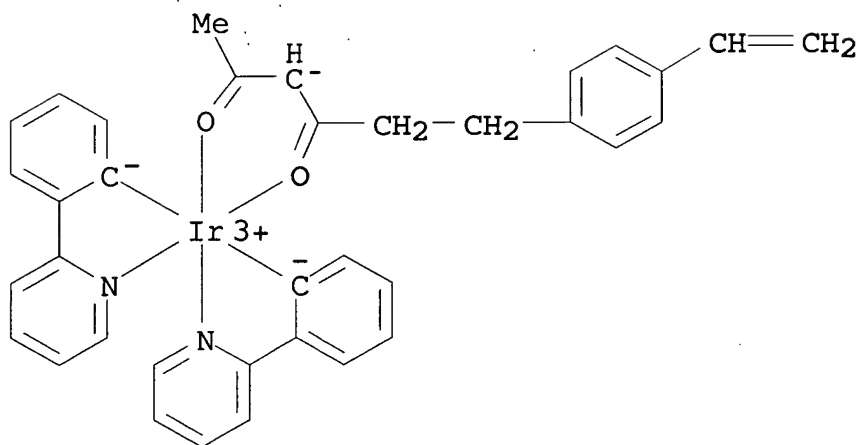


CM 3

CRN 481694-72-8

CMF C36 H31 Ir N2 O2

CCI CCS



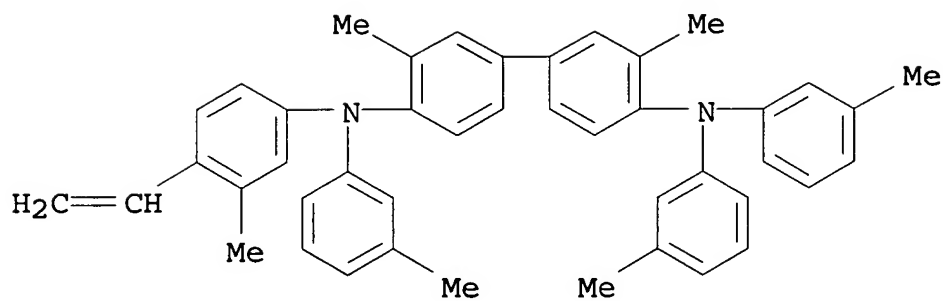
RN 856695-59-5 ZCA

CN Iridium, [6-(4-ethenylphenyl)-2,4-hexanedionato-
 .kappa.O, .kappa.O']bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-,
 polymer with (4-ethenyl-2,6-dimethylphenyl)bis(2,4,6-
 trimethylphenyl)borane and N-(4-ethenyl-3-methylphenyl)-3,3'-
 dimethyl-N,N',N'-tris(3-methylphenyl)[1,1'-biphenyl]-4,4'-diamine
 (9CI) (CA INDEX NAME)

CM 1

CRN 856695-39-1

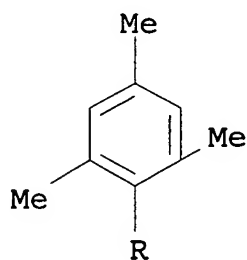
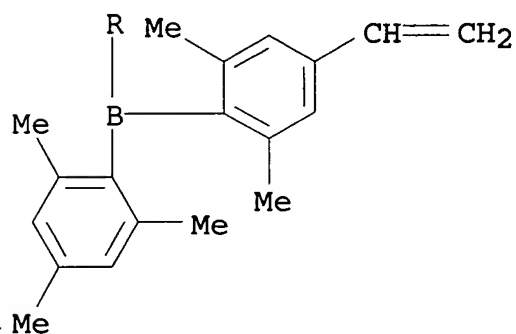
CMF C44 H42 N2



CM 2

CRN 856695-22-2

CMF C28 H33 B

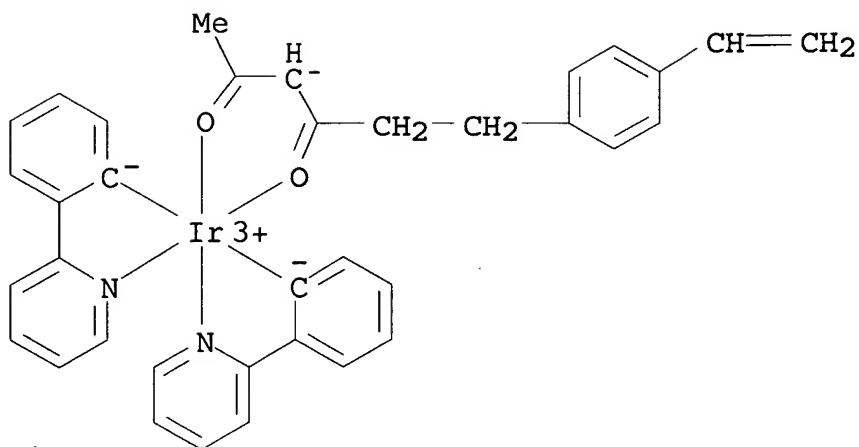


CM 3

CRN 481694-72-8

CMF C36 H31 Ir N2 O2

CCI CCS



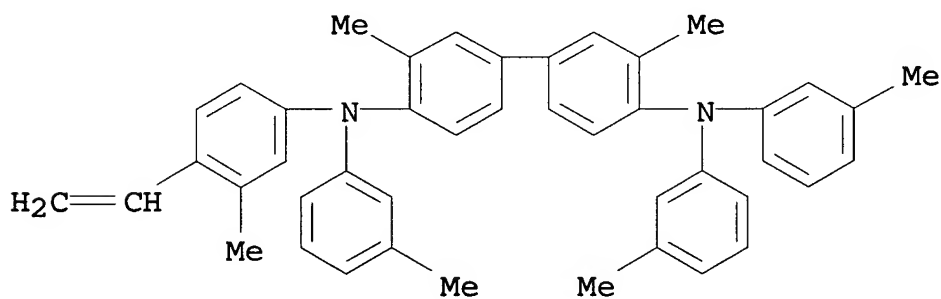
RN 856695-60-8 ZCA

CN Iridium, [6-(4-ethenylphenyl)-2,4-hexanedionato-
 .kappa.O, .kappa.O']bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-,
 polymer with (4'-ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)bis(2,4,6-
 trimethylphenyl)borane and N-(4-ethenyl-3-methylphenyl)-3,3'-
 dimethyl-N,N',N'-tris(3-methylphenyl)[1,1'-biphenyl]-4,4'-diamine
 (9CI) (CA INDEX NAME)

CM 1

CRN 856695-39-1

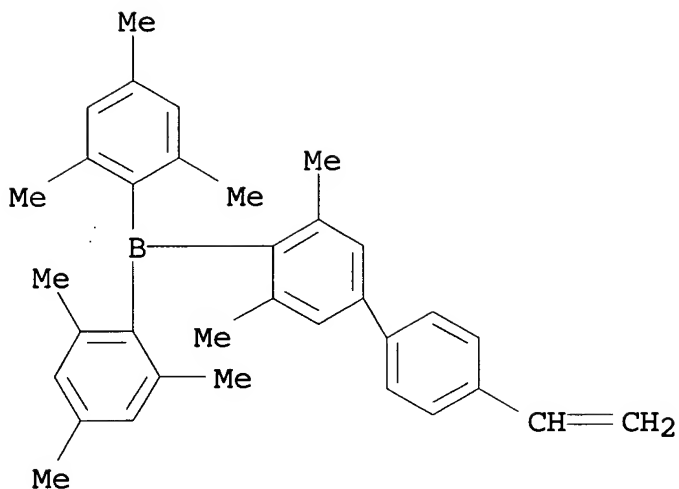
CMF C44 H42 N2



CM 2

CRN 856695-27-7

CMF C34 H37 B

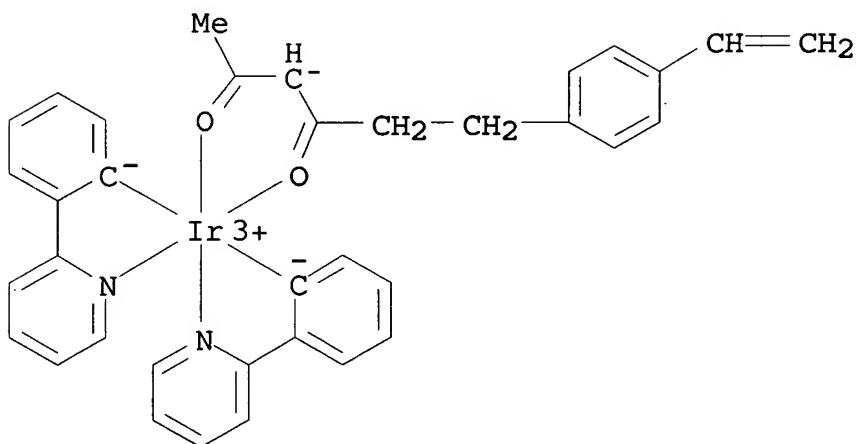


CM 3

CRN 481694-72-8

CMF C36 H31 Ir N2 O2

CCI CCS



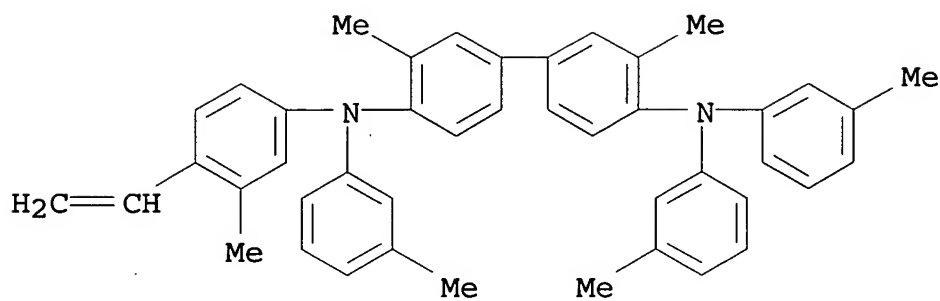
RN 856695-61-9 ZCA

CN Iridium, [6-(4-ethenylphenyl)-2,4-hexanedionato-
 .kappa.O, .kappa.O']bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-,
 polymer with bis(3,5-dimethyl[1,1'-biphenyl]-4-yl)(4'-ethenyl-3,5-
 dimethyl[1,1'-biphenyl]-4-yl)borane and N-(4-ethenyl-3-methylphenyl)-
 3,3'-dimethyl-N,N',N'-tris(3-methylphenyl)[1,1'-biphenyl]-4,4'-
 diamine (9CI) (CA INDEX NAME)

CM 1

CRN 856695-39-1

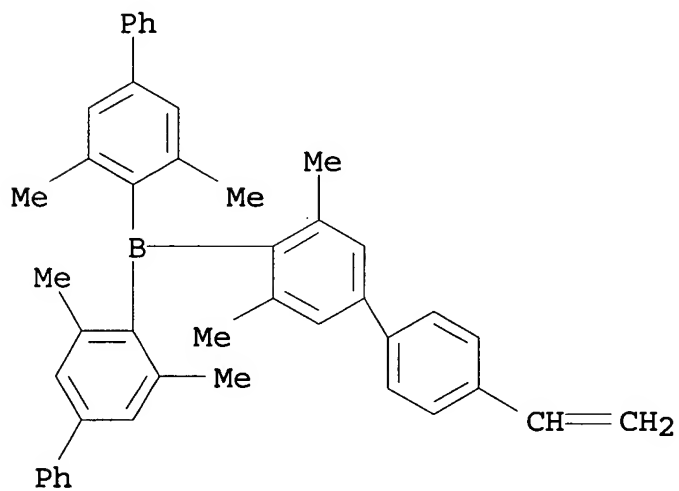
CMF C44 H42 N2



CM 2

CRN 856695-28-8

CMF C44 H41 B

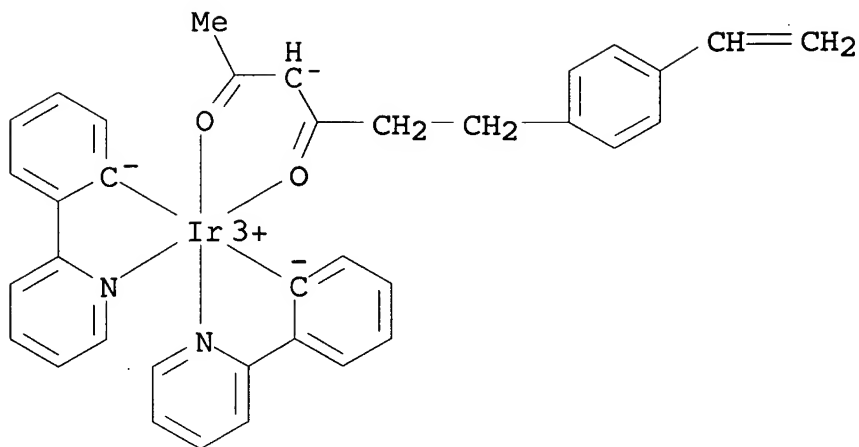


CM 3

CRN 481694-72-8

CMF C36 H31 Ir N2 O2

CCI CCS

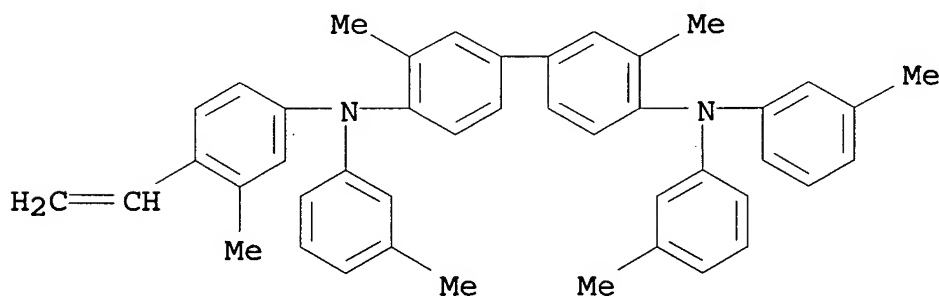


RN 856695-62-0 ZCA
 CN Iridium, [6-(4-ethenylphenyl)-2,4-hexanedionato-
 .kappa.O, .kappa.O']bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-,
 polymer with bis(3,5-dimethyl[1,1':4',1''-terphenyl]-4-yl)(4'-
 ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)borane and
 3,3'-dimethyl-N-(4-ethenyl-3-methylphenyl)-N,N',N'-tris(3-
 methylphenyl)[1,1'-biphenyl]-4,4'-diamine (9CI) (CA INDEX NAME)

CM 1

CRN 856695-39-1

CMF C44 H42 N2

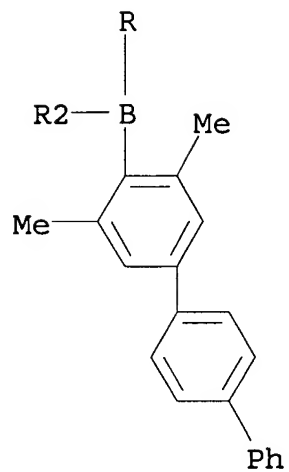


CM 2

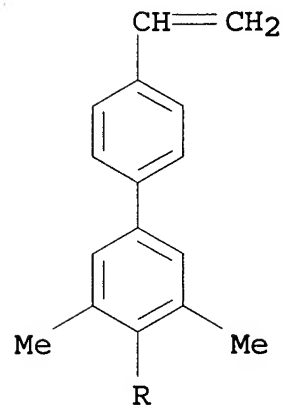
CRN 856695-35-7

CMF C56 H49 B

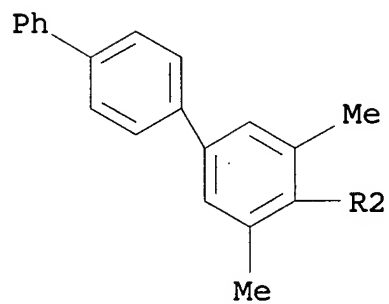
PAGE 1-A



PAGE 2-A



PAGE 3-A

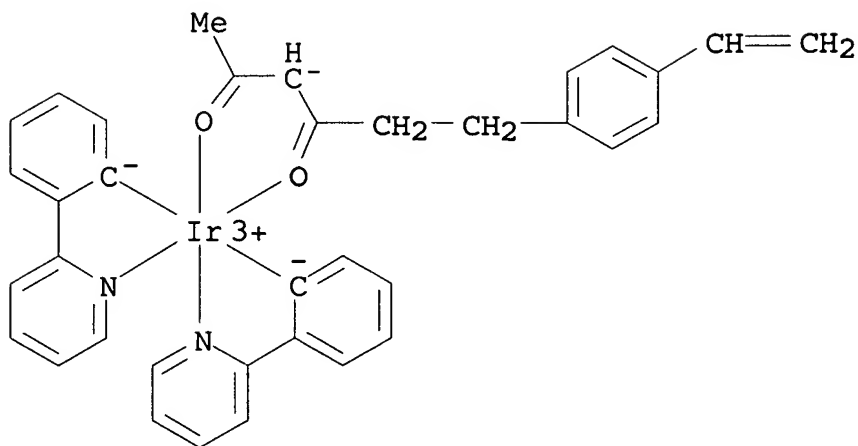


CM 3

CRN 481694-72-8

CMF C36 H31 Ir N2 O2

CCI CCS



RN 857061-54-2 ZCA

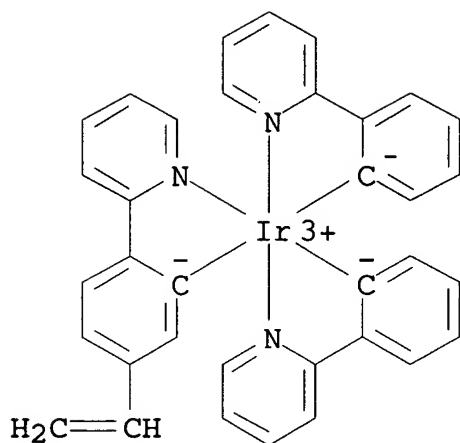
CN Iridium, [5-ethenyl-2-(2-pyridinyl-κN)phenyl-κC]bis[2-(2-pyridinyl-κN)phenyl-κC]-, polymer with (4-ethenylphenyl)bis(2,4,6-trimethylphenyl)borane (9CI) (CA INDEX NAME)

CM 1

CRN 857061-53-1

CMF C35 H26 Ir N3

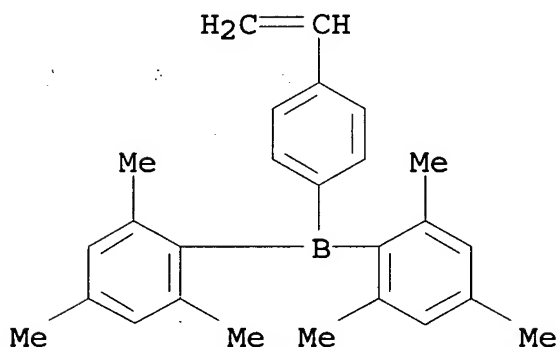
CCI CCS



CM 2

CRN 856695-21-1

CMF C26 H29 B



RN 857061-55-3 ZCA

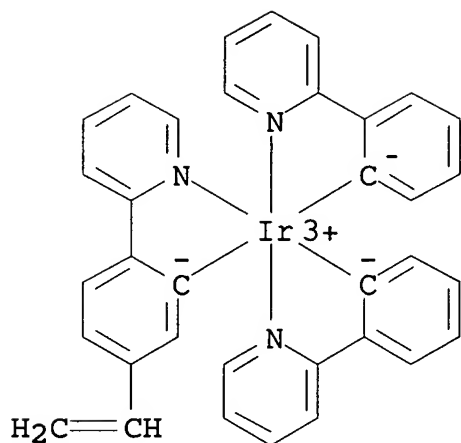
CN Iridium, [5-ethenyl-2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-, polymer with (4-ethenyl-2,6-dimethylphenyl)bis(2,4,6-trimethylphenyl)borane (9CI) (CA INDEX NAME)

CM 1

CRN 857061-53-1

CMF C35 H26 Ir N3

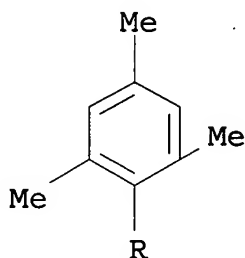
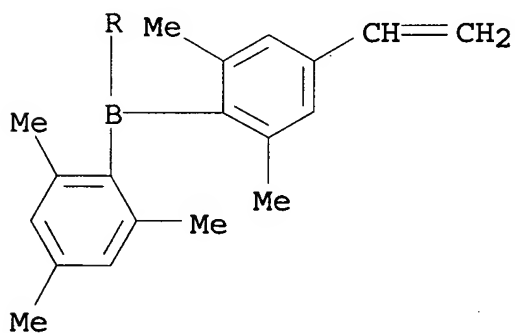
CCI CCS



CM 2

CRN 856695-22-2

CMF C28 H33 B



RN 857061-56-4 ZCA

CN Iridium, [5-ethenyl-2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-, polymer with (4'-ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)bis(2,4,6-

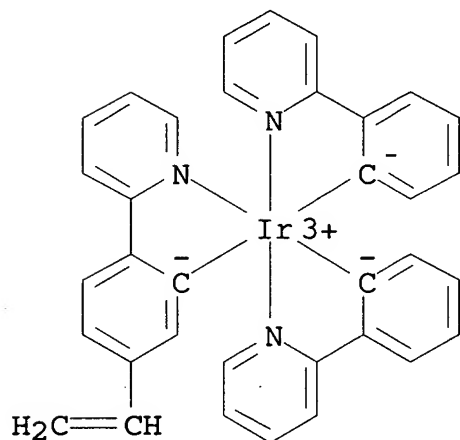
trimethylphenyl)borane (9CI) (CA INDEX NAME)

CM 1

CRN 857061-53-1

CMF C35 H26 Ir N3

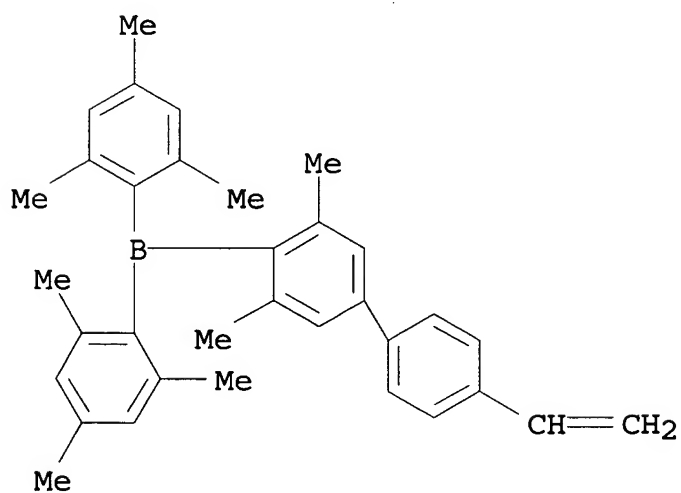
CCI CCS



CM 2

CRN 856695-27-7

CMF C34 H37 B



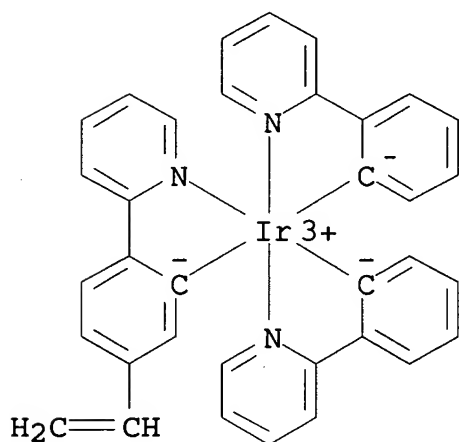
RN 857061-57-5 ZCA

CN Iridium, [5-ethenyl-2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-, polymer with

bis(3,5-dimethyl[1,1'-biphenyl]-4-yl)(4'-ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)borane (9CI) (CA INDEX NAME)

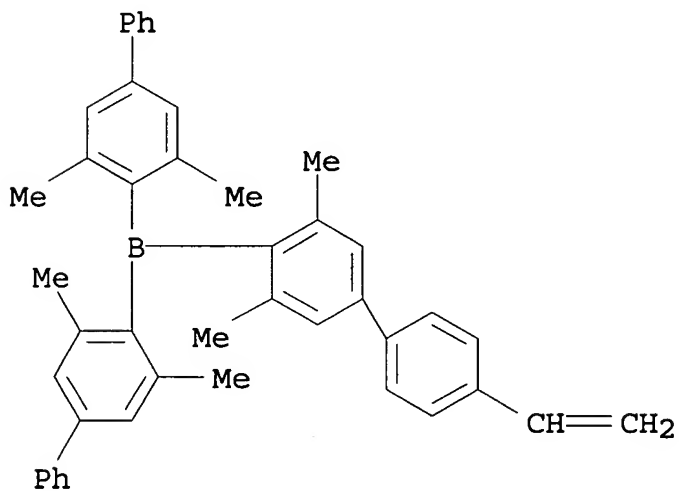
CM 1

CRN 857061-53-1
CMF C35 H26 Ir N3
CCI CCS



CM 2

CRN 856695-28-8
CMF C44 H41 B



RN 857061-58-6 ZCA
CN Iridium, [5-ethenyl-2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]bis[2-(2-

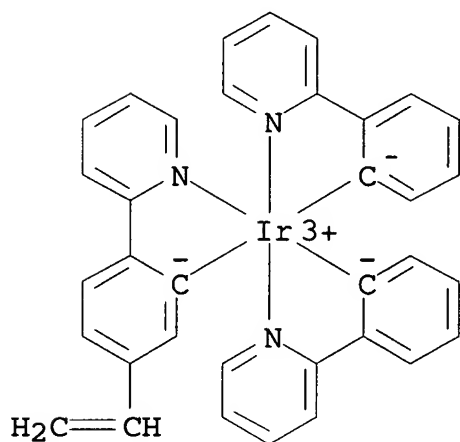
pyridinyl-.kappa.N)phenyl-.kappa.C]-, polymer with
 bis(3,5-dimethyl[1,1':4',1''-terphenyl]-4-yl)(4'-ethenyl-3,5-
 dimethyl[1,1'-biphenyl]-4-yl)borane (9CI) (CA INDEX NAME)

CM 1

CRN 857061-53-1

CMF C35 H26 Ir N3

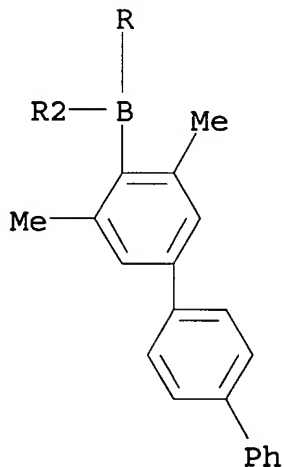
CCI CCS



CM 2

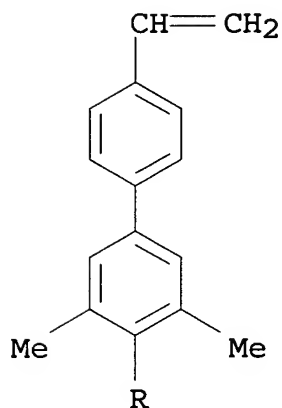
CRN 856695-35-7

CMF C56 H49 B

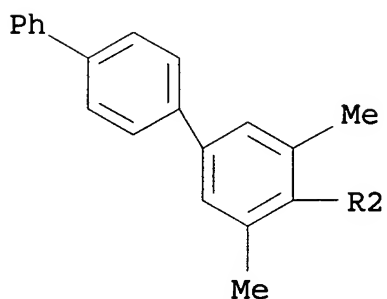


PAGE 1-A

PAGE 2-A



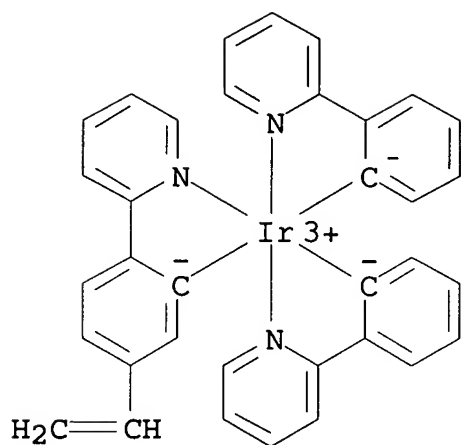
PAGE 3-A



RN 857061-59-7 ZCA
 CN Iridium, [5-ethenyl-2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-, polymer with N-(4-ethenyl-3-methylphenyl)-3,3'-dimethyl-N,N',N'-tris(3-methylphenyl)[1,1'-biphenyl]-4,4'-diamine and (4-ethenylphenyl)bis(2,4,6-trimethylphenyl)borane (9CI) (CA INDEX NAME)

CM 1

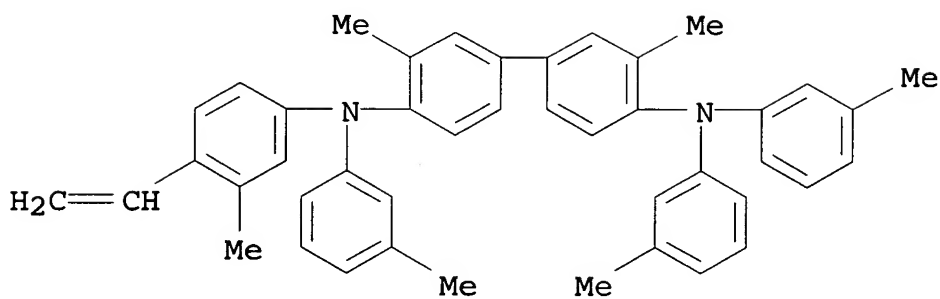
CRN 857061-53-1
 CMF C35 H26 Ir N3
 CCI CCS



CM 2

CRN 856695-39-1

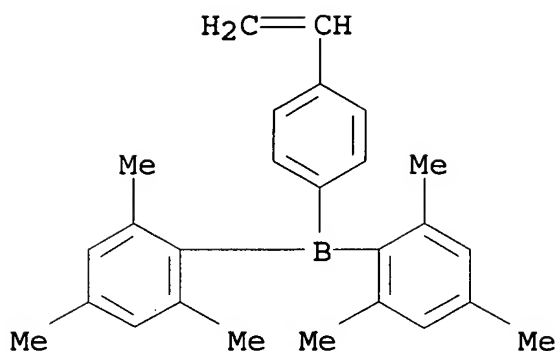
CMF C44 H42 N2



CM 3

CRN 856695-21-1

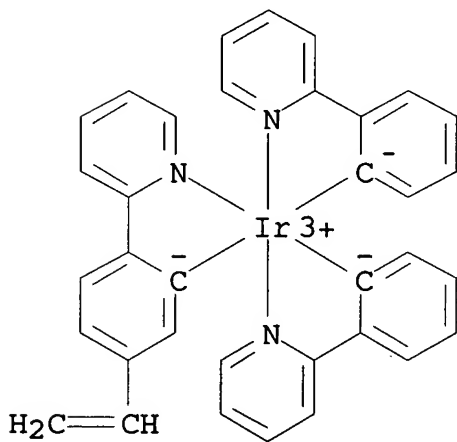
CMF C26 H29 B



RN 857061-60-0 ZCA
 CN Iridium, [5-ethenyl-2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-, polymer with (4-ethenyl-2,6-dimethylphenyl)bis(2,4,6-trimethylphenyl)borane and N-(4-ethenyl-3-methylphenyl)-3,3'-dimethyl-N,N',N'-tris(3-methylphenyl)[1,1'-biphenyl]-4,4'-diamine (9CI) (CA INDEX NAME)

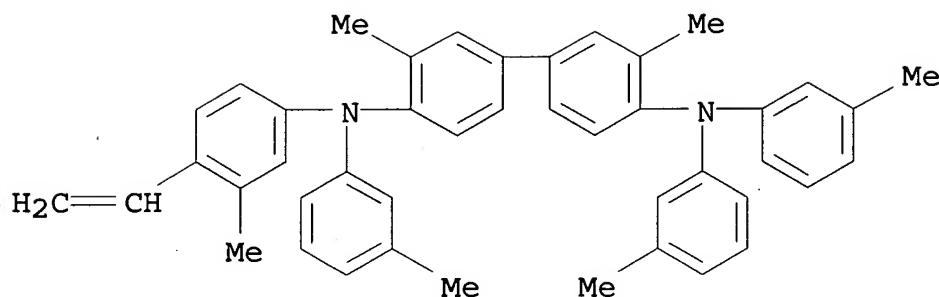
CM 1

CRN 857061-53-1
 CMF C35 H26 Ir N3
 CCI CCS



CM 2

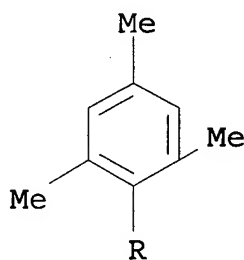
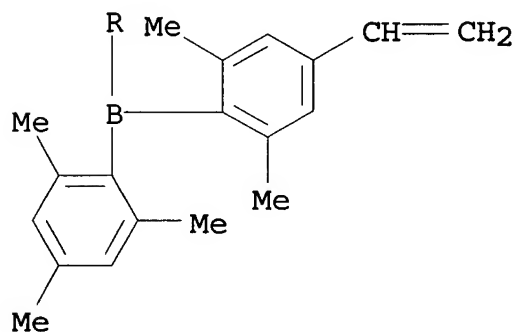
CRN 856695-39-1
 CMF C44 H42 N2



CM 3

CRN 856695-22-2

CMF C28 H33 B

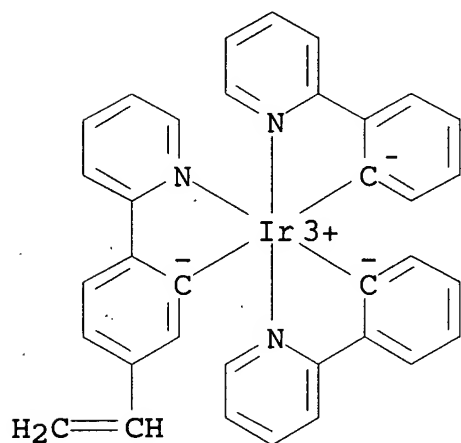


RN 857061-61-1 ZCA

CN Iridium, [5-ethenyl-2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-, polymer with (4'-ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)bis(2,4,6-trimethylphenyl)borane and N-(4-ethenyl-3-methylphenyl)-3,3'-dimethyl-N,N',N'-tris(3-methylphenyl)[1,1'-biphenyl]-4,4'-diamine (9CI) (CA INDEX NAME)

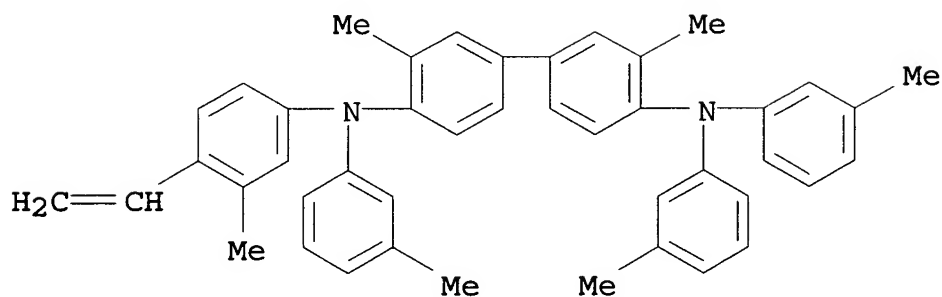
CM 1

CRN 857061-53-1
CMF C35 H26 Ir N3
CCI CCS



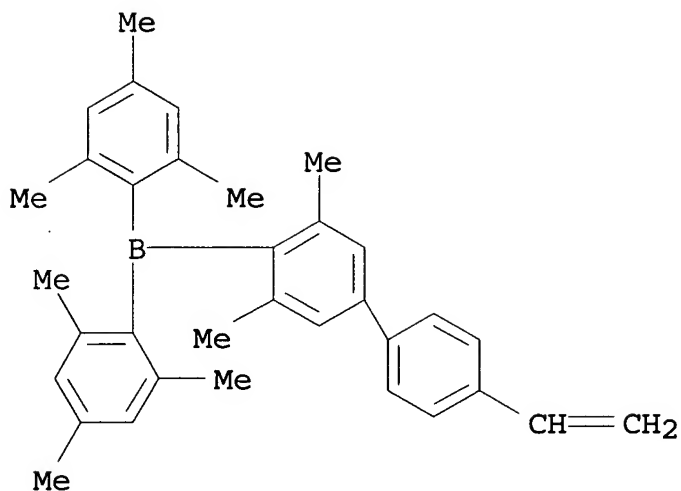
CM 2

CRN 856695-39-1
CMF C44 H42 N2



CM 3

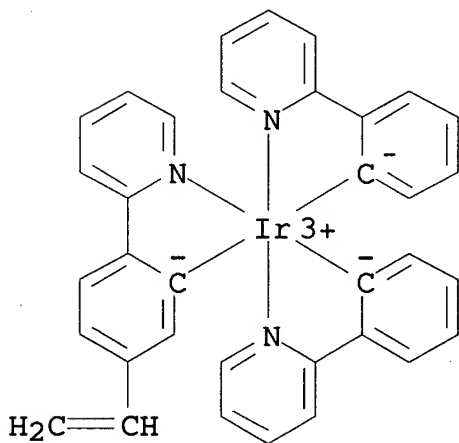
CRN 856695-27-7
CMF C34 H37 B



RN 857061-62-2 ZCA
 CN Iridium, [5-ethenyl-2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-, polymer with bis(3,5-dimethyl[1,1'-biphenyl]-4-yl)(4'-ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)borane and N-(4-ethenyl-3-methylphenyl)-3,3'-dimethyl-N,N',N'-tris(3-methylphenyl)[1,1'-biphenyl]-4,4'-diamine (9CI) (CA INDEX NAME)

CM 1

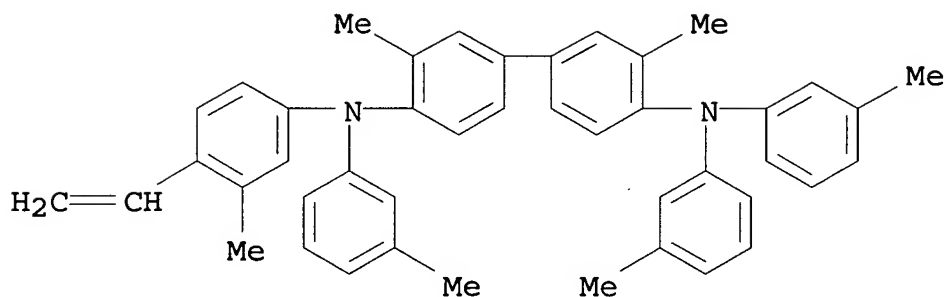
CRN 857061-53-1
 CMF C35 H26 Ir N3
 CCI CCS



CM 2

CRN 856695-39-1

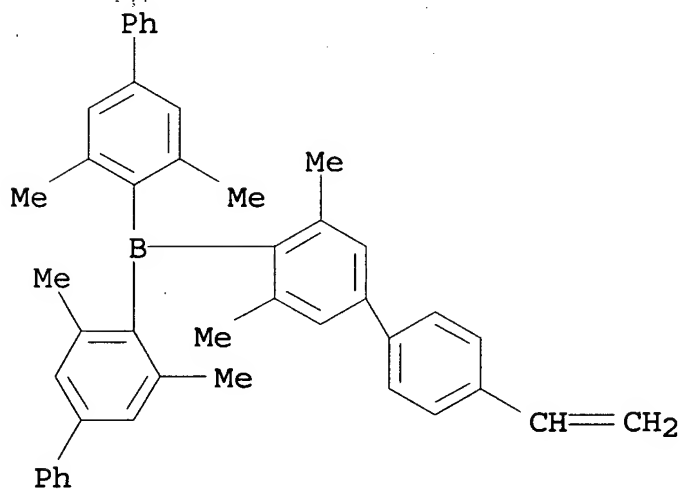
CMF C44 H42 N2



CM 3

CRN 856695-28-8

CMF C44 H41 B



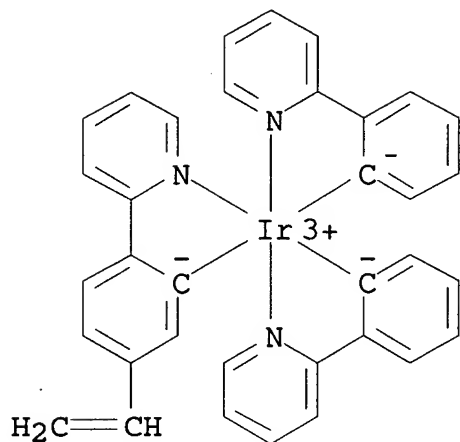
RN 857061-63-3 ZCA

CN Iridium, [5-ethenyl-2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]bis[2-(2-pyridinyl-.kappa.N)phenyl-.kappa.C]-, polymer with bis(3,5-dimethyl[1,1':4',1''-terphenyl]-4-yl)(4'-ethenyl-3,5-dimethyl[1,1'-biphenyl]-4-yl)borane and N-(4-ethenyl-3-methylphenyl)-3,3'-dimethyl-N,N',N''-tris(3-methylphenyl)[1,1'-biphenyl]-4,4'-diamine (9CI) (CA INDEX NAME)

CM 1

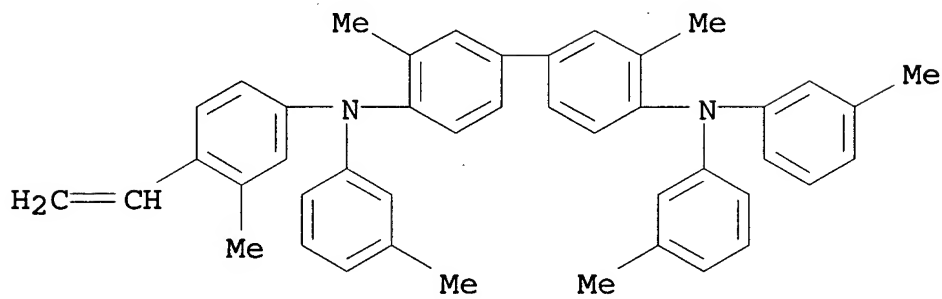
CRN 857061-53-1

CMF C35 H26 Ir N3
CCI CCS



CM 2

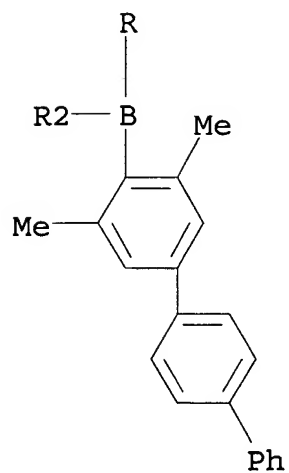
CRN 856695-39-1
CMF C44 H42 N2



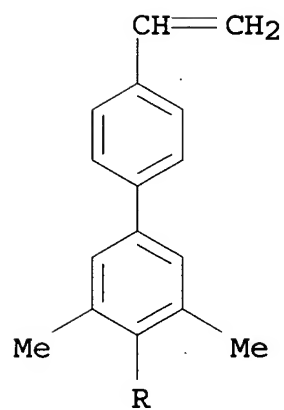
CM 3

CRN 856695-35-7
CMF C56 H49 B

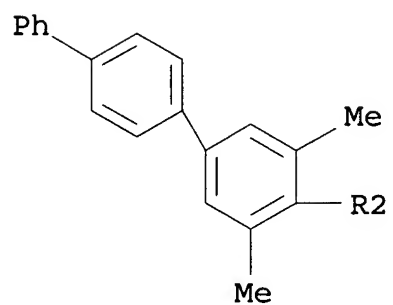
PAGE 1-A



PAGE 2-A



PAGE 3-A



IT 856695-41-5P 856695-42-6P 856695-43-7P
856695-44-8P 856695-45-9P 856695-46-0P
856695-47-1P 856695-48-2P 856695-49-3P
856695-50-6P 856695-51-7P 856695-52-8P
856695-53-9P 856695-55-1P 856695-56-2P
856695-58-4P 856695-59-5P 856695-60-8P
856695-61-9P 856695-62-0P 857061-54-2P
857061-55-3P 857061-56-4P 857061-57-5P
857061-58-6P 857061-59-7P 857061-60-0P
857061-61-1P 857061-62-2P 857061-63-3P
(boron-contg. polymer compd. and org. light emitting device using
the same)

L35 ANSWER 3 OF 18 ZCA COPYRIGHT 2006 ACS on STN

142:363771 Radiation-sensitive positive resist compositions with
excellent etching resistance, sensitivity, and resolution. Kai,
Toshiyuki; Nishiyama, Satoru; Tsuji, Takayuki (JSR Ltd., Japan).
Jpn. Kokai Tokkyo Koho JP 2005084365 A2 20050331, 29 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 2003-316385 20030909.

AB The compns. contain polymers bearing units of sulfonium salts
CH₂CR₁(AQ₁S+R₂)X- [R₁ = H, halo, cyano, C1-5 linear or branched
(halo)alkyl; R₂ = (un)substituted Ph; A = single bond, ether, ester,
or amide bond; X- = anion] and iodonium salts CH₂CR₁(AQ₂I+R₃)X- (R₁,
A, X- = same as above; R₃ = same as R₂) and optionally polymers
bearing acid-dissociable groups.

IT 849024-51-7DP, hydrolyzed 849024-52-8DP,
hydrolyzed 849024-53-9DP, hydrolyzed 849024-54-0DP
, hydrolyzed 849024-56-2DP, hydrolyzed
849024-57-3DP, hydrolyzed 849024-58-4DP,
hydrolyzed 849024-60-8P

(radiation-sensitive pos. resists contg. onium-contg. polymers
with good etching resistance, electron beam or x-ray sensitivity,
and resoln.)

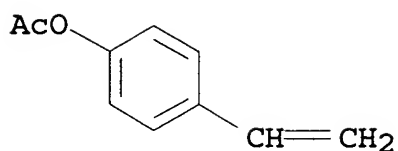
RN 849024-51-7 ZCA

CN Sulfonium, [4-[(1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with
trifluoromethanesulfonic acid (1:1), polymer with 4-ethenylphenyl
acetate (9CI) (CA INDEX NAME)

CM 1

CRN 2628-16-2

CMF C10 H10 O2



CM 2

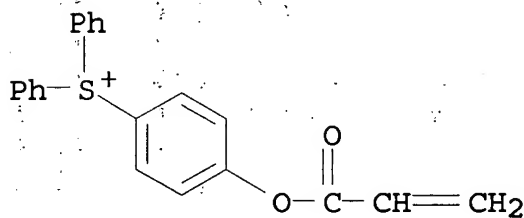
CRN 141801-35-6

CMF C21 H17 O2 S . C F3 O3 S

CM 3

CRN 141801-31-2

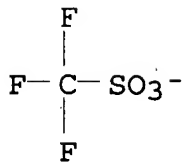
CMF C21 H17 O2 S



CM 4

CRN 37181-39-8

CMF C F3 O3 S

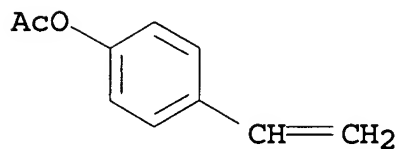


RN 849024-52-8 ZCA

CN Sulfonium, [4-[(1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with .alpha.,.alpha.,.beta.,.beta.-tetrafluorobicyclo[2.2.1]heptane-2-ethanesulfonic acid (1:1), polymer with 4-ethenylphenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 2628-16-2
CMF C10 H10 O2

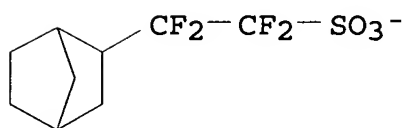


CM 2

CRN 849024-47-1
CMF C21 H17 O2 S . C9 H11 F4 O3 S

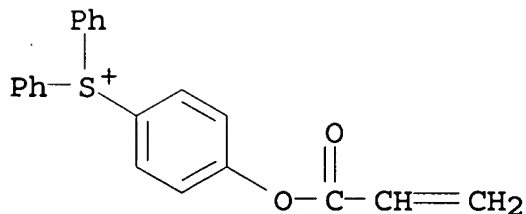
CM 3

CRN 474516-37-5
CMF C9 H11 F4 O3 S



CM 4

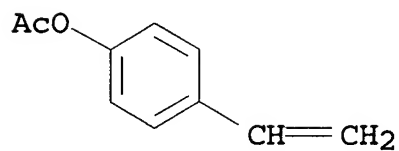
CRN 141801-31-2
CMF C21 H17 O2 S



RN 849024-53-9 ZCA
CN Sulfonium, [4-[(1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with 7,7-dimethyl-2-oxobicyclo[2.2.1]heptane-1-methanesulfonic acid (1:1), polymer with 4-ethenylphenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 2628-16-2
CMF C10 H10 O2

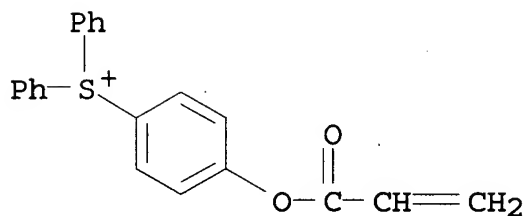


CM 2

CRN 849024-48-2
CMF C21 H17 O2 S . C10 H15 O4 S

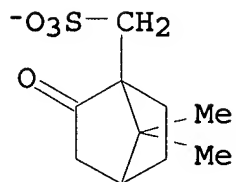
CM 3

CRN 141801-31-2
CMF C21 H17 O2 S



CM 4

CRN 55077-28-6
CMF C10 H15 O4 S

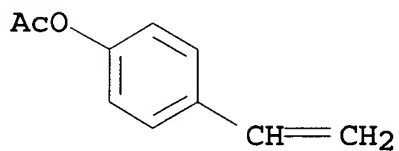


RN 849024-54-0 ZCA
CN Sulfonium, [4-[(2-methyl-1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 4-ethenylphenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 2628-16-2

CMF C10 H10 O2



CM 2

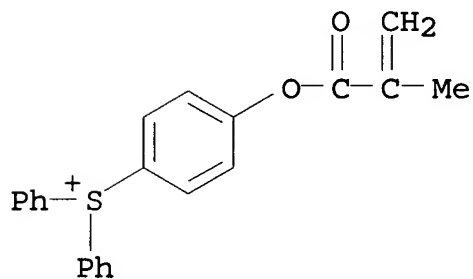
CRN 212579-97-0

CMF C22 H19 O2 S . C F3 O3 S

CM 3

CRN 212579-96-9

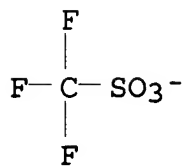
CMF C22 H19 O2 S



CM 4

CRN 37181-39-8

CMF C F3 O3 S



RN 849024-56-2 ZCA

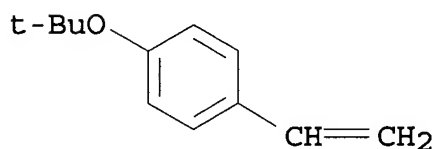
CN Sulfonium, [4-[(1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with

trifluoromethanesulfonic acid (1:1), polymer with
1-(1,1-dimethylethoxy)-4-ethenylbenzene and 4-ethenylphenyl acetate
(9CI) (CA INDEX NAME)

CM 1

CRN 95418-58-9

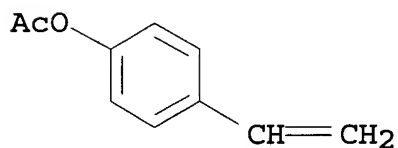
CMF C12 H16 O



CM 2

CRN 2628-16-2

CMF C10 H10 O2



CM 3

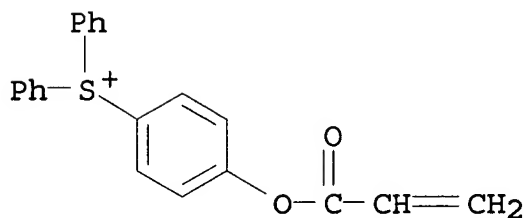
CRN 141801-35-6

CMF C21 H17 O2 S . C F3 O3 S

CM 4

CRN 141801-31-2

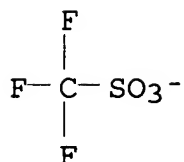
CMF C21 H17 O2 S



CM 5

CRN 37181-39-8

CMF C F3 O3 S



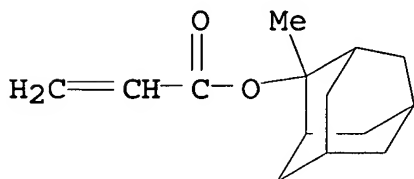
RN 849024-57-3 ZCA

CN Sulfonium, [4-[(1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with .alpha.,.alpha.,.beta.,.beta.-tetrafluorobicyclo[2.2.1]heptane-2-ethanesulfonic acid (1:1), polymer with 1-(1,1-dimethylethoxy)-4-ethenylbenzene and 2-methyltricyclo[3.3.1.3,7]dec-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 249562-06-9

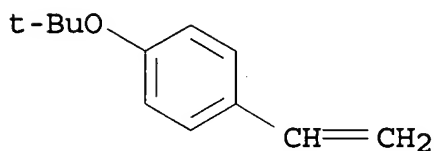
CMF C14 H20 O2



CM 2

CRN 95418-58-9

CMF C12 H16 O

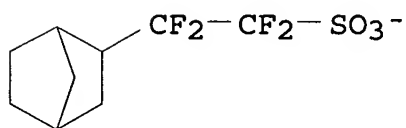


CM 3

CRN 849024-47-1
 CMF C21 H17 O2 S . C9 H11 F4 O3 S

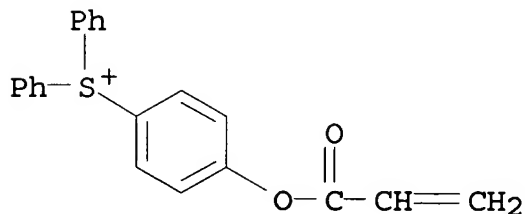
CM 4

CRN 474516-37-5
 CMF C9 H11 F4 O3 S



CM 5

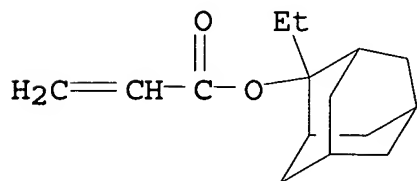
CRN 141801-31-2
 CMF C21 H17 O2 S



RN 849024-58-4 ZCA
 CN Sulfonium, [4-[(1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1-(1,1-dimethylethoxy)-4-ethenylbenzene and 2-ethyltricyclo[3.3.1.3,7]dec-2-yl 2-propenoate (9CI). (CA INDEX NAME)

CM 1

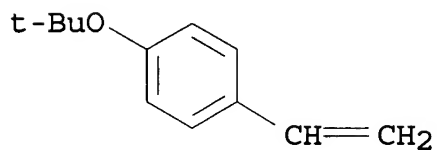
CRN 303186-14-3
 CMF C15 H22 O2



CM 2

CRN 95418-58-9

CMF C12 H16 O



CM 3

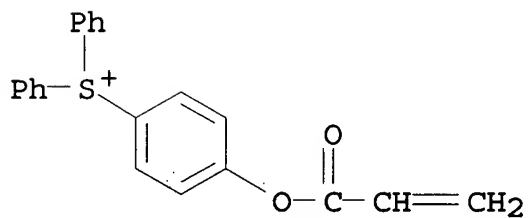
CRN 141801-35-6

CMF C21 H17 O2 S . C F3 O3 S

CM 4

CRN 141801-31-2

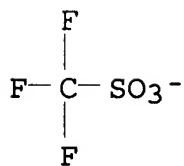
CMF C21 H17 O2 S



CM 5

CRN 37181-39-8

CMF C F3 O3 S



RN 849024-60-8 ZCA

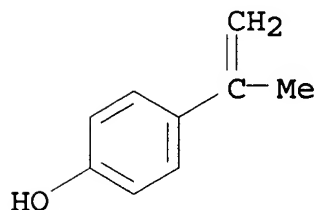
CN Sulfonium, [4-[(1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with

trifluoromethanesulfonic acid (1:1), polymer with
4-(1-methylethenyl)phenol (9CI) (CA INDEX NAME)

CM 1

CRN 4286-23-1

CMF C9 H10 O



CM 2

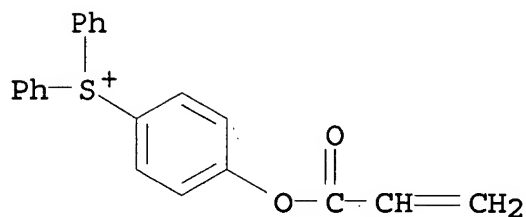
CRN 141801-35-6

CMF C21 H17 O2 S . C F3 O3 S

CM 3

CRN 141801-31-2

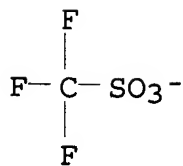
CMF C21 H17 O2 S



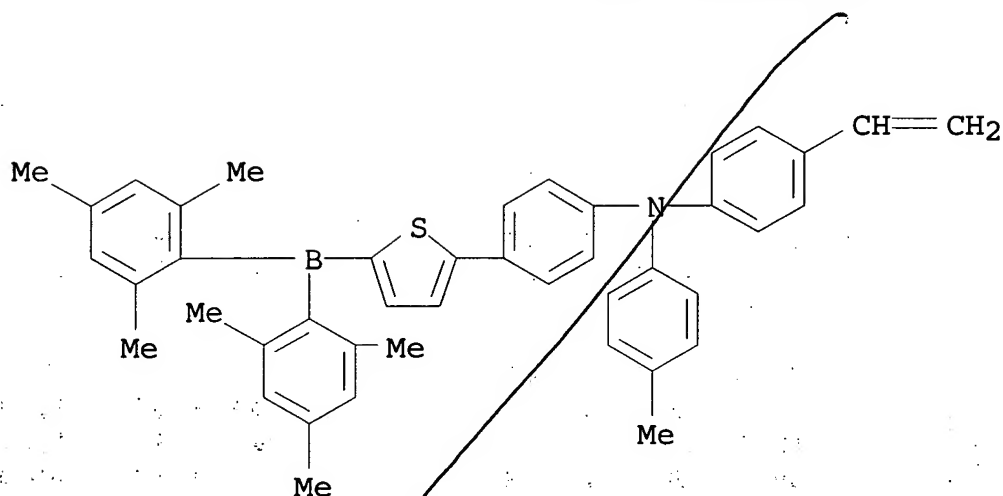
CM 4

CRN 37181-39-8

CMF C F3 O3 S



- IT 849024-51-7DP, hydrolyzed 849024-52-8DP,
hydrolyzed 849024-53-9DP, hydrolyzed 849024-54-0DP
, hydrolyzed 849024-56-2DP, hydrolyzed
849024-57-3DP, hydrolyzed 849024-58-4DP,
hydrolyzed 849024-60-8P
(radiation-sensitive pos. resists contg. onium-contg. polymers
with good etching resistance, electron beam or x-ray sensitivity,
and resoln.)
- L35 ANSWER 4 OF 18 ZCA COPYRIGHT 2006 ACS on STN
141:174513 Development of a new class of hole-transporting and emitting
vinyl polymers and their application in organic electroluminescent
devices. Mutaguchi, Daisuke; Okumoto, Kenji; Ohseido, Yutaka;
Moriwaki, Kazuyuki; Shiota, Yasuhiko (Faculty of Engineering,
Department of Applied Chemistry, Osaka University, Suita, Osaka,
565-0871, Japan). Organic Electronics, 4(2-3), 49-59 (English)
2003. CODEN: OERLAU. ISSN: 1566-1199. Publisher: Elsevier Science
B.V..
- AB A new class of hole-transporting vinyl polymers,
poly{4-vinyl-4'-[bis(4'-tert-butylbiphenyl-4-yl)amino]biphenyl}
(PVBAB) and poly{4-vinyl-4'-[N,N-bis(9,9-dimethylfluoren-2-
yl)amino]biphenyl} (PVFAB), and a new emitting vinyl polymer,
poly(2-{4-[4-vinylphenyl(4-methylphenyl)amino]phenyl}-5-
dimesitylborylthiophene) (PVPhAMB-1T), were designed and
synthesized. These new vinyl polymers form smooth amorphous films
with high glass transition temps. of ca. 200 .degree.C. PVBAB and
PVFAB possess electron-donating properties, and PVPhAMB-1T possesses
bipolar character with both electron-donating and accepting
properties, exhibiting strong fluorescence in soln. and as films.
Org. electroluminescent devices using PVBAB or PVFAB as a
hole-transport layer and N,N'-dimethylquinacridone-doped
tris(8-quinolinolato)aluminum as an emitting layer were thermally
stable and exhibited very high performance. The use of PVPhAMB-1T
as an emitting material also permitted the fabrication of a
high-performance, green-emitting org. EL device.
- IT 733745-02-3P
(emitting polymer; synthesis of new class of hole-transporting
and emitting vinyl polymers and their application in org.
electroluminescent devices)
- RN 733745-02-3 ZCA
CN Benzenamine, 4-[5-[bis(2,4,6-trimethylphenyl)boryl]-2-thienyl]-N-(4-
ethenylphenyl)-N-(4-methylphenyl)-, homopolymer (9CI) (CA INDEX
NAME)
- CM 1
- CRN 733745-01-2
CMF C43 H42 B N S



IT 733745-02-3P

(emitting polymer; synthesis of new class of hole-transporting and emitting vinyl polymers and their application in org. electroluminescent devices)

L35 ANSWER 5 OF 18 ZCA COPYRIGHT 2006 ACS on STN

141:96344 Organic electroluminescent device for displays and illumination source and its production method. Kita, Hiroshi; Yamada, Taketoshi; Suzurizato, Yoshiyuki; Ueda, Noriko (Konica Minolta Holdings Inc., Japan). Jpn. Kokai Tokkyo Koho JP 2004185967 A2 20040702, 65 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2002-351157 20021203.

AB The invention relates to an org. electroluminescent device comprising a light-emitting layer contg. a phosphorescent dopant and a multifunctioning polymer, wherein, at least, the two of functional mol. units selected from a luminescent host unit, a hole transporting unit, and an electron transporting unit constitute the multifunctioning polymer.

IT 714976-33-7 714976-36-0

(org. electroluminescent device having phosphorescent dopant and multifunctioning polymer in light emitting layer)

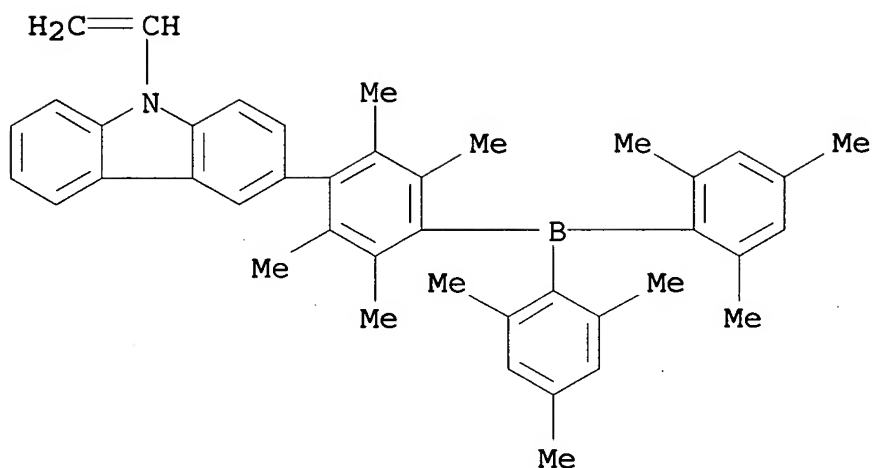
RN 714976-33-7 ZCA

CN 9H-Carbazole, 3-[4-[bis(2,4,6-trimethylphenyl)boryl]-2,3,5,6-tetramethylphenyl]-9-ethenyl-, polymer with 3,5-bis(2,5-dimethylphenyl)-4-(4-ethenylphenyl)-4H-1,2,4-triazole (9CI) (CA INDEX NAME)

CM 1

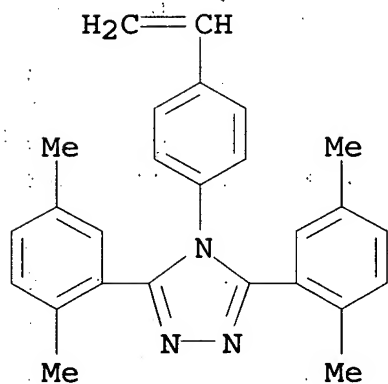
CRN 714976-32-6

CMF C42 H44 B N



CM 2

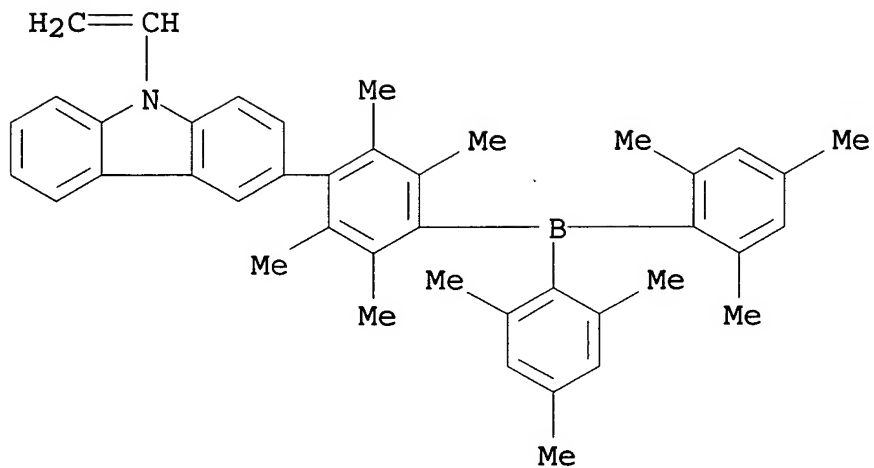
CRN 714976-14-4
CMF C26 H25 N3



RN 714976-36-0 ZCA
CN Benzenamine, 4,4'-[[4-[(4-ethenylphenyl)phenylamino]-2,5-dimethylphenyl]methylene]bis[2,5-dimethyl-N,N-diphenyl-, polymer with 3,5-bis(2,5-dimethylphenyl)-4-(4-ethenylphenyl)-4H-1,2,4-triazole and 3-[4-[bis(2,4,6-trimethylphenyl)boryl]-2,3,5,6-tetramethylphenyl]-9-ethenyl-9H-carbazole (9CI) (CA INDEX NAME)

CM 1

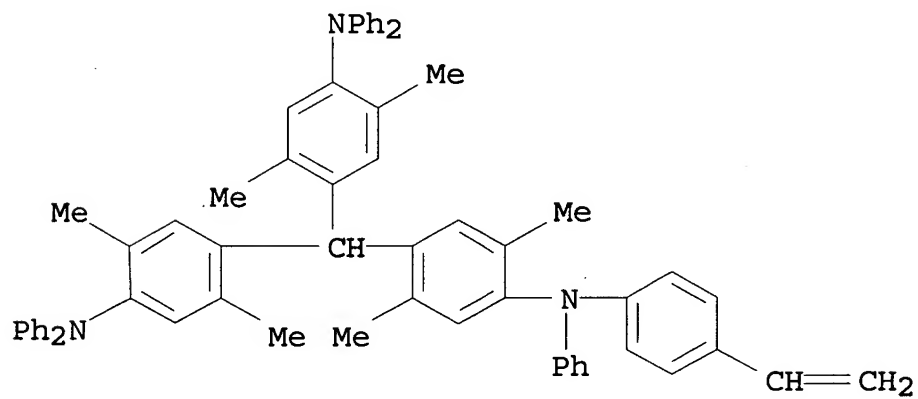
CRN 714976-32-6
CMF C42 H44 B N



CM 2

CRN 714976-20-2

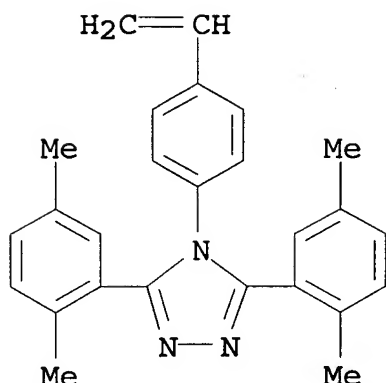
CMF C63 H57 N3



CM 3

CRN 714976-14-4

CMF C26 H25 N3



IT 714976-33-7 714976-36-0

(org. electroluminescent device having phosphorescent dopant and multifunctioning polymer in light emitting layer)

L35 ANSWER 6 OF 18 ZCA COPYRIGHT 2006 ACS on STN

133:151075 Borate-based ionic polymers, olefin polymerization catalysts using them, and manufacture of polyolefins. Kanamaru, Masami; Okamoto, Takaharu; Okuda, Fumio; Kamisawa, Mitsugu (Idemitsu Petrochemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000212225 A2 20000802, 13 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-16549 19990126.

AB The ionic polymers contain repeating units CR5R6CR7(ZkYlQ1B-Q23X+) and optionally CR1R2CR3R4 (R1-7 = H, C1-20-(halogenated) hydrocarbyl, Si-contg. group; Q1 = unsubstituted phenylene, or phenylene with substituents halo, C1-20-(halogenated) hydrocarbyl; Q2 = unsubstituted Ph, or Ph with substituents of Q1; Z, Y = C1-20-alkylene, C6-20-arylene, silylene, germylene, etc.; X = onium; k, l = 0, 1; k + l .gtoreq. 1) and the catalysts comprise the ionic polymers, VIII-X group transition metal complexes, and org. Al compds. Thus, ethylene was polyemd. in the presence of an ionic polymer [prepd. from styrene-chloromethylstyrene copolymer, lithium 2,3,5,6-tetrafluorophenyltris(pentafluorophenyl)borate, and dimethylanilinium chloride], Me3Al, and N,N'-Bis(2,6-diisopropylphenyl)ethanediiminedibromonickel, showing catalytic activity 26.5 kg/g-Ni-h and no scales on the reactor wall.

IT 287210-03-1P

(catalyst; borate-based ionic polymers for olefin polymn. catalysts)

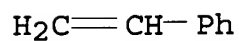
RN 287210-03-1 ZCA

CN Borate(1-), [4-[(4-ethenylphenyl)methyl]-2,3,5,6-tetrafluorophenyl]tris(pentafluorophenyl)-, (T-4)-, hydrogen, compd. with N,N-dimethylbenzenamine (1:1), polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

CMF C8 H8



CM 2

CRN 247176-66-5

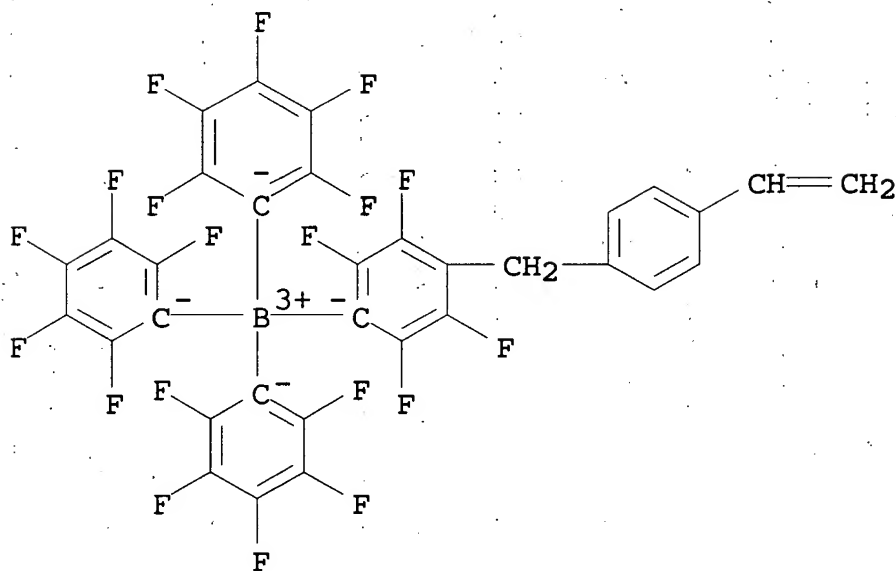
CMF C33 H9 B F19 . C8 H11 N . H

CM 3

CRN 247176-65-4

CMF C33 H9 B F19 . H

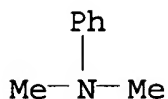
CCI CCS



CM 4

CRN 121-69-7

CMF C8 H11 N



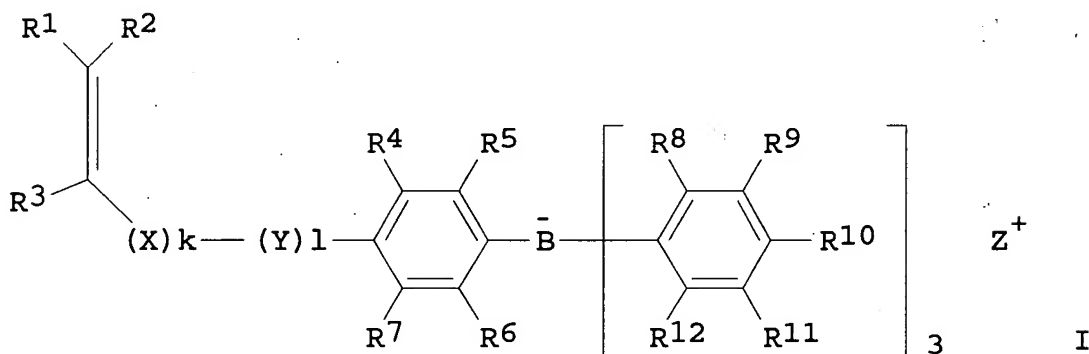
IT 287210-03-1P

(catalyst; borate-based ionic polymers for olefin polymn. catalysts)

L35 ANSWER 7 OF 18 ZCA COPYRIGHT 2006 ACS on STN

133:43964 Ionic compounds and catalysts and method for polymerization of olefins. Kanemaru, Masami; Okamoto, Takuji; Okuda, Fumio; Kamisawa, Mitsugu (Idemitsu Petrochemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000178281 A2 20000627, 13 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-360318 19981218.

GI



AB Title compds. I (R1-R3 = H, C1-20 hydrocarbyl, C1-20 halohydrocarbyl, Si-contg. group; R4-R12 = H, halo, C1-20 hydrocarbonyl, C1-20 halohydrocarbyl; X, Y = C1-20 alkylene, C6-20 arylene, silylene, germylene, etc.; Z = onium compds.; k, l = 1, 0; k + l .gtoreq. 1) are prepd. The catalysts comprise Group 8-10 transition metal compds., I, and org. aluminum compds. Thus, ethylene was polyemd. in the presence of Et3Al, N,N-dimethylanilinium tris(pentafluorophenyl)-4-(4-vinylbenzyl)-2,3,5,6-tetrafluorophenylborate (prepn. given), and dibromo[N,N'-bis(2,6-diisopropylphenyl)ethanediimine-N,N']nickel to give a polymer with catalytic activity 27.69 kg/g-Ni-h.

IT 247176-68-7P

(lithium fluorophenylborate as catalysts for olefin polymn.)

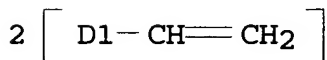
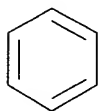
RN 247176-68-7 ZCA
CN Borate(1-), [4-[(4-ethenylphenyl)methyl]-2,3,5,6-tetrafluorophenyl]tris(pentafluorophenyl)-, (T-4)-, hydrogen, compd. with N,N-dimethylbenzenamine (1:1), polymer with diethenylbenzene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1321-74-0

CMF C10 H10

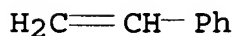
CCI IDS



CM 2

CRN 100-42-5

CMF C8 H8



CM 3

CRN 247176-66-5

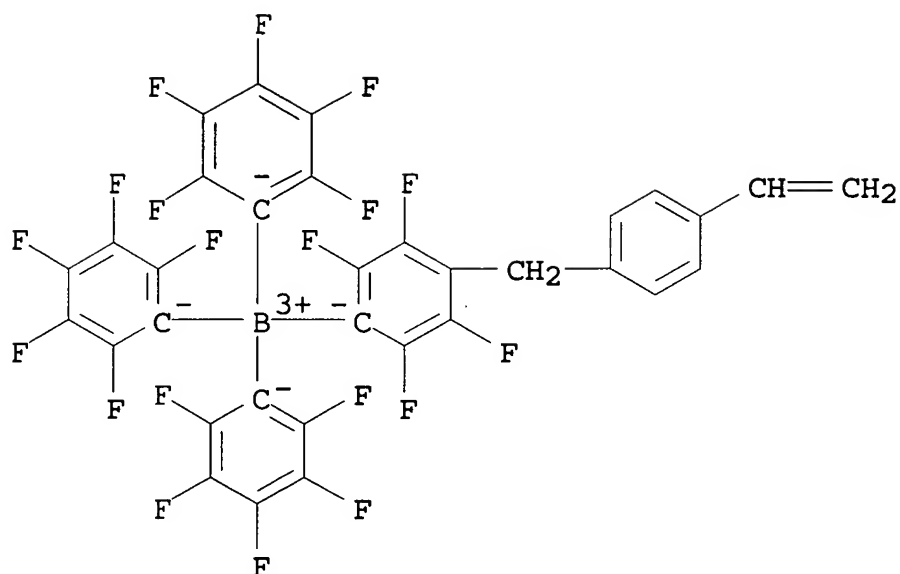
CMF C33 H9 B F19 . C8 H11 N . H

CM 4

CRN 247176-65-4

CMF C33 H9 B F19 . H

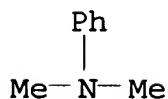
CCI CCS



CM 5

CRN 121-69-7

CMF C8 H11 N



IT 247176-68-7P

(lithium fluorophenylborate as catalysts for olefin polymn.)

L35 ANSWER 8 OF 18 ZCA COPYRIGHT 2006 ACS on STN

131:299816 Onium borate compounds, metallocene polymerization catalysts containing them and manufacture of olefin polymers using the catalysts. Kanamaru, Masami; Fujikawa, Shinjiro; Okamoto, Takuji (Idemitsu Petrochemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11286491 A2 19991019 Heisei, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-86983 19980331.

AB The catalysts with high activity even when being supported, esp. useful for the gas-phase or slurry-phase metallocene polymn. of olefins, comprise (A) transition metal compds., (B) organo-aluminum

compds. and (C) onium salts of bridged p-vinylic group-substituted tetrafluorophenyltris-(optionally halogen-, C1-20 hydrocarbyl- or halohydrocarbyl-substituted)phenylborate compds., which optionally can be transformed into (crosslinked) (co)polymers prior to use. Thus, slowly combining Li 2,3,5,6-tetrafluorophenyltris(pentafluorophenyl)borate in dry THF with a hexane soln. of BuLi at -78.degree., mixing for 1 h, transferring the resulting mixt. into a THF soln. of p-chloromethylstyrene at -78.degree., and after 1.5 h, warming to room temp., removing the solvents in vacuo, adding CH₂Cl₂ and dimethylanilinium chloride and mixing at room temp. for 1 h and working up gave N,N-dimethylanilinium tris(pentafluorophenyl)-4-(4-vinylbenzyl)-2,3,5,6-tetrafluorophenylborate, which was heated with styrene and divinylbenzene in PhMe in the presence of AIBN to give a copolymer (I). Polymg. propylene using the I, rac-dimethylsilylenebis(2-methyl-4,5-benzoindenyl)zirconium dichloride and triisobutylaluminum gave a polypropylene with high m.p. and intrinsic viscosity.

IT 247176-68-7P

(supported catalysts; manuf. of onium borate compds. for use with metallocene catalysts in prodn. of olefin polymers)

RN 247176-68-7 ZCA

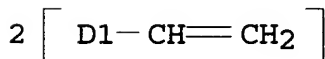
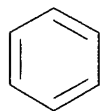
CN Borate(1-), [4-[(4-ethenylphenyl)methyl]-2,3,5,6-tetrafluorophenyl]tris(pentafluorophenyl)-, (T-4)-, hydrogen, compd. with N,N-dimethylbenzenamine (1:1), polymer with diethenylbenzene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1321-74-0

CMF C10 H10

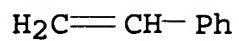
CCI IDS



CM 2

CRN 100-42-5

CMF C8 H8



CM 3

CRN 247176-66-5

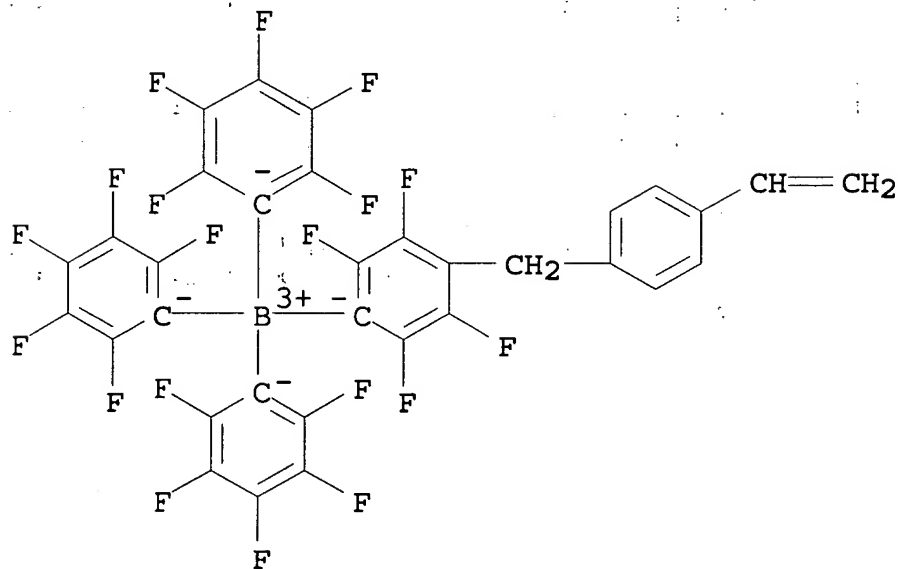
CMF C33 H9 B F19 . C8 H11 N . H

CM 4

CRN 247176-65-4

CMF C33 H9 B F19 . H

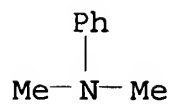
CCI CCS



CM 5

CRN 121-69-7

CMF C8 H11 N



IT 247176-68-7P

(supported catalysts; manuf. of onium borate compds. for use with metallocene catalysts in prodn. of olefin polymers)

L35 ANSWER 9 OF 18 ZCA COPYRIGHT 2006 ACS on STN

125:87466 Boron-containing compound, its polymer, catalyst comprising the polymer and metallocene compound, and producing polyolefin. Ono, Michio; Hinokuma, Shinji; Miyake, Shigenobu; Inazawa, Shintaro (Japan Polyolefins Co., Ltd., Japan). Eur. Pat. Appl. EP 710663 A1 19960508, 33 pp. DESIGNATED STATES: R: BE, DE, FR, GB, IT, NL. (English). CODEN: EPXXDW. APPLICATION: EP 1995-116991 19951027. PRIORITY: JP 1994-269012 19941101; JP 1994-289998 19941124.

AB A polymerizable B-contg. compd. [R5R6C:C(R4)(Y)iB-R1-3]X+ [I; Y = a (halo)hydrocarbyl, i = 0 or 1, and X+ = a univalent cation, e.g. carbonium; R1-3 = (halo)hydrocarbyl or (Si-contg.)hydrocarbyl, halogen, H; R4-6 = H, alkyl, aralkyl, aryl, or alkylaryl] and the addn. polymer of I is used in combination with a metallocene compd., as a catalyst system for polymn. of an olefin. The monomer I (R4-6 = H; Y = C6H4; R1-3 = trispentafluorophenyl; X+ = trimethylammonium) (prepn. given) was polymd. with styrene to give 17.9:82.1 addn. polymer (no.-av. mol. wt. 2100), which was mixed with Cp2ZrCl2 and triisobutylaluminum (II) soln. in PhMe to give a solid catalyst. This catalyst solid (in hexane) was used in polymn. of ethylene (10 kg/cm2) at 70.degree. for 30 min, with II cocatalyst, to give polyethylene having d. 0.954 g/cm3 and polydispersity 2.36.

IT 178808-51-0P 178808-52-1P 178808-53-2P
178808-55-4P

(polymerizable boron-contg. compd. as catalyst precursor for olefin polymn.)

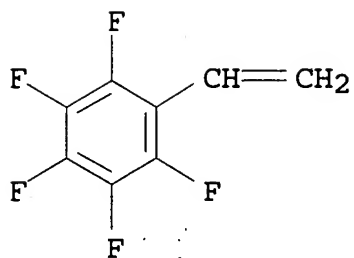
RN 178808-51-0 ZCA

CN Borate(1-), (4-ethenylphenyl)tris(pentafluorophenyl)-, (T-4)-, hydrogen, compd. with N,N-dimethylmethanamine, polymer with ethenylpentafluorobenzene (9CI) (CA INDEX NAME)

CM 1

CRN 653-34-9

CMF C8 H3 F5



CM 2

CRN 178808-50-9

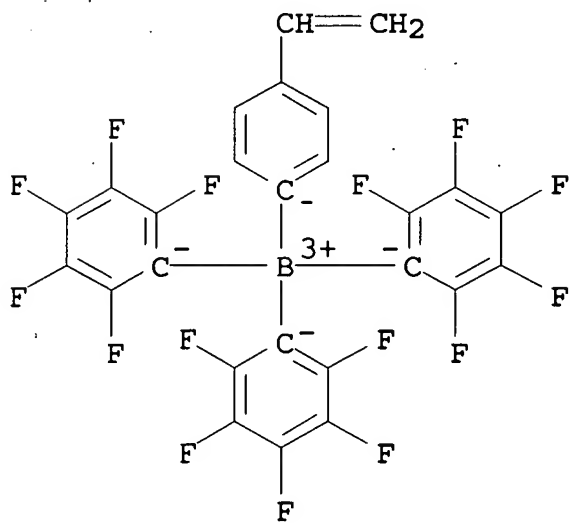
CMF C26 H7 B F15 . C3 H9 N . H

CM 3

CRN 168200-68-8

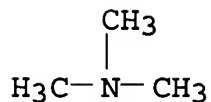
CMF C26 H7 B F15 . H

CCI CCS

● H⁺

CM 4

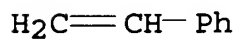
CRN 75-50-3
CMF C3 H9 N



RN 178808-52-1 ZCA
CN Borate(1-), (4-ethenylphenyl)tris(pentafluorophenyl)-, (T-4)-,
hydrogen, compd. with N,N-dimethylbenzenamine, polymer
ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5
CMF C8 H8

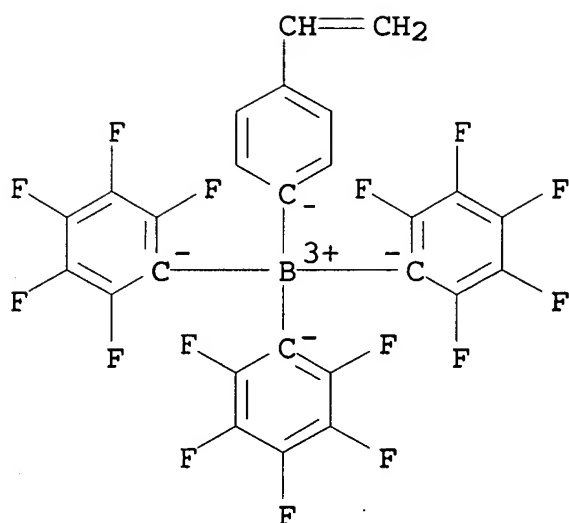


CM 2

CRN 168200-69-9
CMF C26 H7 B F15 . C8 H11 N . H

CM 3

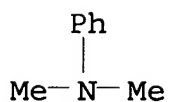
CRN 168200-68-8
CMF C26 H7 B F15 . H
CCI CCS



CM 4

CRN 121-69-7

CMF C8 H11 N



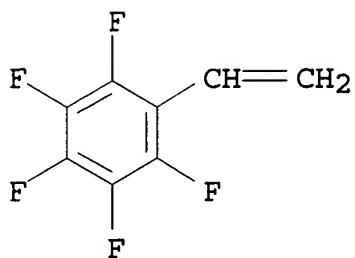
RN 178808-53-2 ZCA

CN Borate(1-), (4-ethenylphenyl)tris(pentafluorophenyl)-, (T-4)-, hydrogen, compd. with N,N-dimethylbenzenamine, polymer with ethenylpentafluorobenzene (9CI) (CA INDEX NAME)

CM 1

CRN 653-34-9

CMF C8 H3 F5



CM 2

CRN 168200-69-9

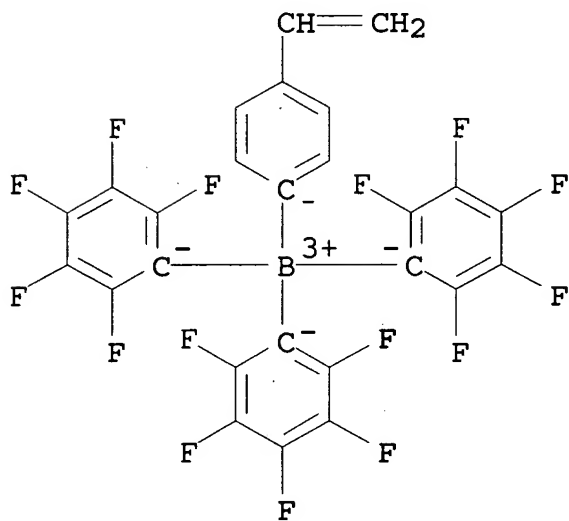
CMF C26 H7 B F15 . C8 H11 N . H

CM 3

CRN 168200-68-8

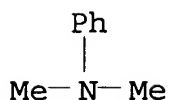
CMF C26 H7 B F15 . H

CCI CCS

● H⁺

CM 4

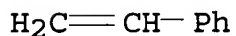
CRN 121-69-7
CMF C8 H11 N



RN 178808-55-4 ZCA
CN Borate(1-), (4-ethenylphenyl)tris(pentafluorophenyl)-, (T-4)-, hydrogen, compd. with N,N-dimethylmethanamine (1:1), polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5
CMF C8 H8

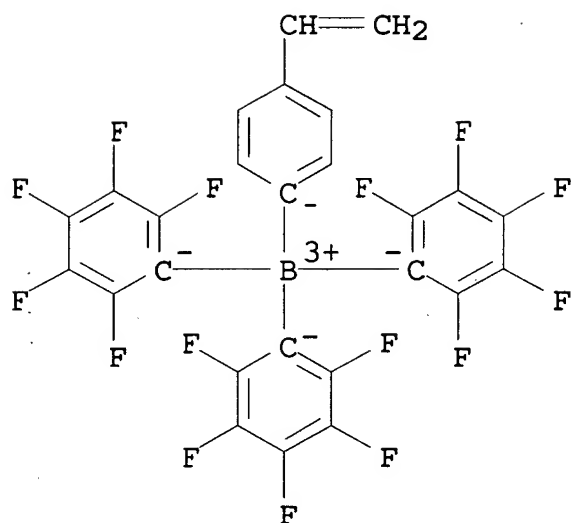


CM 2

CRN 178808-50-9
CMF C26 H7 B F15 . C3 H9 N . H

CM 3

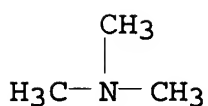
CRN 168200-68-8
CMF C26 H7 B F15 . H
CCI CCS



CM 4

CRN 75-50-3

CMF C3 H9 N



IT 178808-51-0P 178808-52-1P 178808-53-2P
178808-55-4P

(polymerizable boron-contg. compd. as catalyst precursor for
olefin polymn.)

L35 ANSWER 10 OF 18 ZCA COPYRIGHT 2006 ACS on STN
123:199701 Polyionic transition metal catalyst composition for olefin
polymerization. Turner, Howard W. (Exxon Chemical Patents Inc.,
USA). U.S. US 5427991 A 19950627, 24 pp. Cont.-in-part of U.S.
Ser. No. 796,729, abandoned. (English). CODEN: USXXAM.
APPLICATION: US 1993-31004 19930312. PRIORITY: US 1991-796729
19911125.

AB Ionically activated metallocene catalyst compns. which are useful in
the polymn. of olefins comprise transition metal cationic components

assocd. with and stabilized by a polyanionic moiety constituted of non-coordinating anionic groups chem. bonded to core components. The transition metal cationic components typically are cyclopentadienyl ligand-contg. Group 4, 5, and 6 metal compds. having a hydrolyzable ligand such that they react with the activator compds. so as to form the cationic components in non-coordinating assocn. with bulky, labile anions derived from the activator compd. which in turn is chem. bound to the core component, such as a polymeric or metal oxide support. Isotactic polypropylene was manufd. by using such catalysts.

IT 168200-70-2P

(polyionic transition metal catalyst compn. for olefin polymn.)

RN 168200-70-2 ZCA

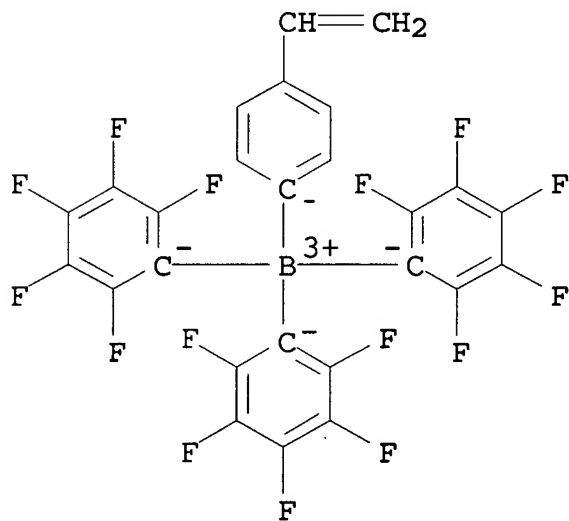
CN Borate(1-), (4-ethenylphenyl)tris(pentafluorophenyl)-, (T-4)-, hydrogen, compd. with N,N-dimethylbenzenamine (1:1), homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 168200-68-8

CMF C26 H7 B F15 . H

CCI CCS

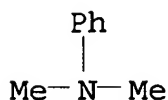


● H⁺

CM 2

CRN 121-69-7

CMF C8 H11 N



IT 168200-70-2P

(polyionic transition metal catalyst compn. for olefin polymn.)

L35 ANSWER 11 OF 18 ZCA COPYRIGHT 2006 ACS on STN

117:8654 Unsaturated onium salts useful in photoresists. Steinmann, Alfred; Schaedeli, Ulrich (Ciba-Geigy A.-G., Switz.). Eur. Pat. Appl. EP 473547 A1 19920304, 19 pp. DESIGNATED STATES: R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE. (German). CODEN: EPXXDW. APPLICATION: EP 1991-810657 19910820. PRIORITY: CH 1990-2765 19900827.

AB The onium salts $\text{CH}_2:\text{C}(\text{R})\text{ZCO}_2\text{C}_6\text{H}_4\text{-p-YPh}^+ \text{X}^-$ [R = H, Me; X = complex anion; Y = I, R₂S (R₂ = alkyl, alkylphenyl); Z = direct bond, C₆H₄, p-phenylenealkylene, alkylene] give copolymers with acid-labile monomers which can be used directly as photoresists. AIBN-initiated polymn. of 0.42 g p-CH₂:CHCO₂C₆H₄SPh₂⁺ AsF₆⁻ (prepd. in 81% yield by acryloylation of the alc.) with 8 g tetrahydropyran-2-yl 4-vinylbenzoate in THF at 60.degree. gave 68% copolymer (I) with wt.-av. mol. wt. 11,000 and polydispersity 2.7. A 1-.mu.m film of I on Si was irradiated by UV (270-310 nm) through a mask, heated at 110.degree. for 1 min, and developed in 0.5% NaHCO₃ to give a pos. image with resolu. in the submicron range.

IT 142064-60-6P 142064-61-7P

(photoresists, manuf. of)

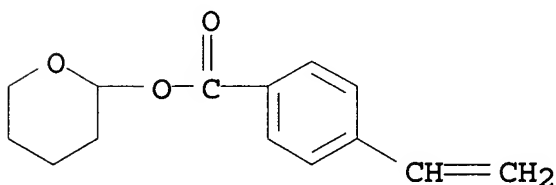
RN 142064-60-6 ZCA

CN Sulfonium, [4-[(1-oxo-2-propenyl)oxy]phenyl]diphenyl-, hexafluoroarsenate(1-), polymer with tetrahydro-2H-pyran-2-yl 4-ethenylbenzoate (9CI) (CA INDEX NAME)

CM 1

CRN 128013-23-0

CMF C14 H16 O3



CM 2

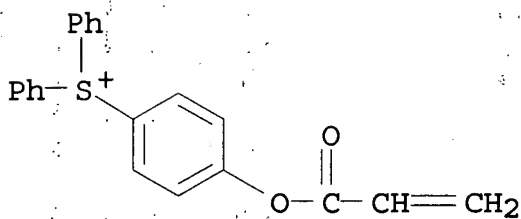
CRN 141801-32-3

CMF C21 H17 O2 S . As F6

CM 3

CRN 141801-31-2

CMF C21 H17 O2 S

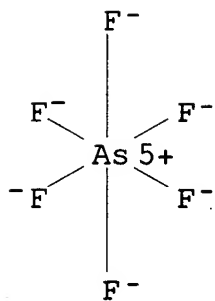


CM 4

CRN 16973-45-8

CMF As F6

CCI CCS



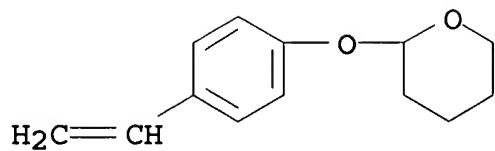
RN 142064-61-7 ZCA

CN Sulfonium, [4-[(1-oxo-2-propenyl)oxy]phenyl]diphenyl-,
hexafluoroarsenate(1-), polymer with 2-(4-ethenylphenoxy)tetrahydro-
2H-pyran (9CI) (CA INDEX NAME)

CM 1

CRN 65409-15-6

CMF C13 H16 O2



CM 2

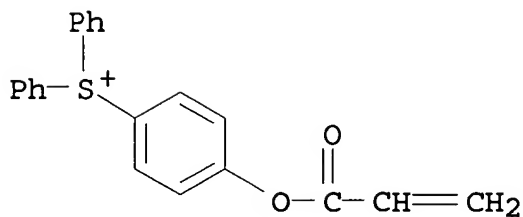
CRN 141801-32-3

CMF C21 H17 O2 S . As F6

CM 3

CRN 141801-31-2

CMF C21 H17 O2 S

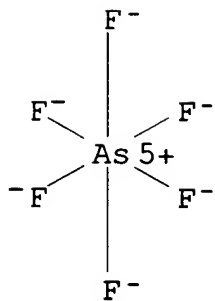


CM 4

CRN 16973-45-8

CMF As F6

CCI CCS



IT 142064-60-6P 142064-61-7P
(photoresists, manuf. of)

L35 ANSWER 12 OF 18 ZCA COPYRIGHT 2006 ACS on STN

114:123918 Thermosetting resin compositions with good storage stability. Endo, Takeshi; Tokuda, Hiroyuki; Hosoda, Atsushi; Tashiro, Namyuki (Dainippon Ink and Chemicals, Inc., Japan). Jpn. Kokai Tokkyo Koho JP 02227419 A2 19900910 Heisei, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1989-47378 19890228.

AB The title compns. giving impact-resistant cured products with good flexibility contain onium salts of polymers and cationically polymerizable org. compds. Thus, 100 parts bisphenol A diglycidyl ether was mixed with 25 parts 90:10 (mol) butadiene-p-vinylbenzyltetramethylenesulfonim hexafluoroantimonate copolymer to give a thermosetting compn., which was spread on tinplates at 40-.mu.m thickness, then heated at 160.degree. for 30 min to give test pieces with good adhesion and resistance to Me₂CO and DMF, which showed pencil hardness H, du Pont impact resistance 45 kg-cm the surface, and 35 kg-cm the reverse side.

IT 132558-12-4 132558-13-5 132558-15-7
132558-16-8 132558-17-9 132558-18-0
132558-21-5 132588-30-8 132588-31-9
(crosslinked, solvent- and impact-resistant)

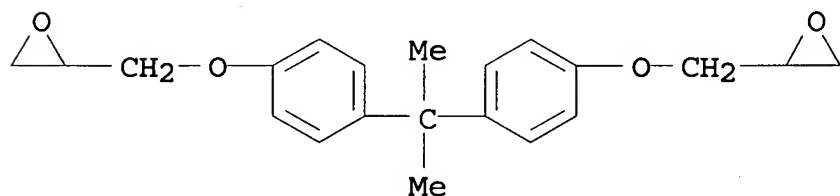
RN 132558-12-4 ZCA

CN Thiophenium, 1-[(4-ethenylphenyl)methyl]tetrahydro-, tetrafluoroborate(1-), polymer with 1,3-butadiene and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 1675-54-3

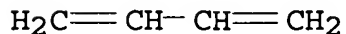
CMF C21 H24 O4



CM 2

CRN 106-99-0

CMF C4 H6



CM 3

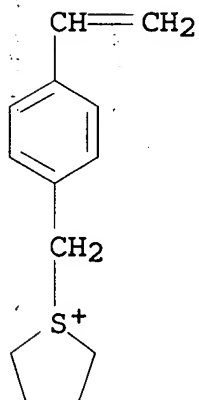
CRN 132558-11-3

CMF C13 H17 S . B F4

CM 4

CRN 106311-34-6

CMF C13 H17 S

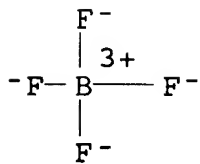


CM 5

CRN 14874-70-5

CMF B F4

CCI CCS



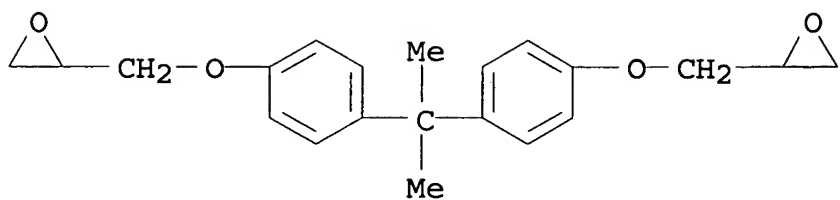
RN 132558-13-5 ZCA

CN Thiophenium, 1-[(4-ethenylphenyl)methyl]tetrahydro-,
hexafluorophosphate(1-), polymer with 1,3-butadiene and
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane
(9CI) (CA INDEX NAME)

CM 1

CRN 1675-54-3

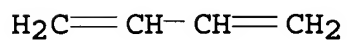
CMF C21 H24 O4



CM 2

CRN 106-99-0

CMF C4 H6



CM 3

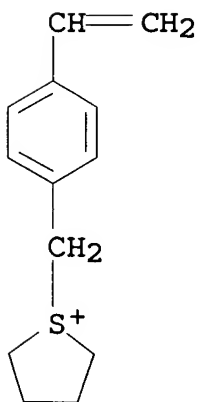
CRN 112760-73-3

CMF C13 H17 S . F6 P

CM 4

CRN 106311-34-6

CMF C13 H17 S

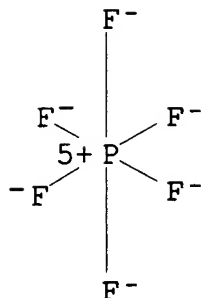


CM 5

CRN 16919-18-9

CMF F6 P

CCI CCS



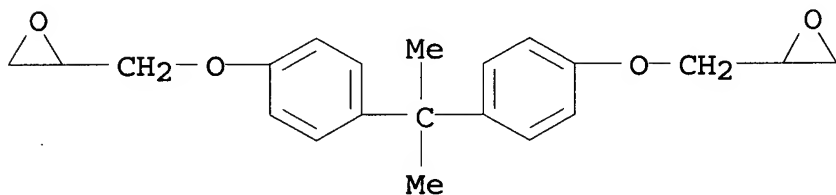
RN 132558-15-7 ZCA

CN Thiophenium, 1-[(4-ethenylphenyl)methyl]tetrahydro-,
hexafluoroarsenate(1-), polymer with 1,3-butadiene and
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane
(9CI) (CA INDEX NAME)

CM 1

CRN 1675-54-3

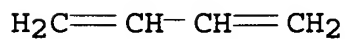
CMF C21 H24 O4



CM 2

CRN 106-99-0

CMF C4 H6



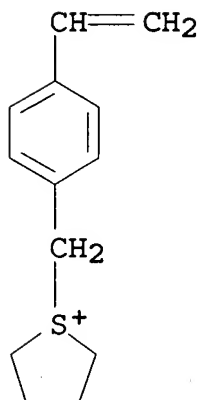
CM 3

CRN 132558-14-6

CMF C13 H17 S . As F6

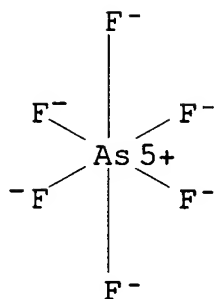
CM 4

CRN 106311-34-6
CMF C13 H17 S



CM 5

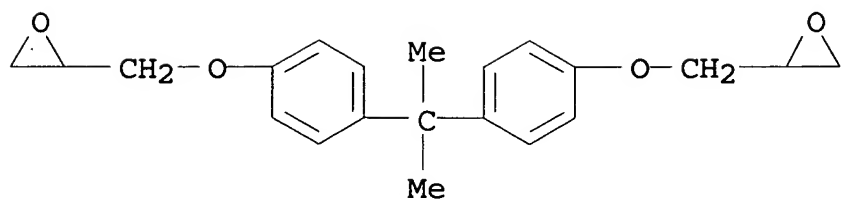
CRN 16973-45-8
CMF As F6
CCI CCS



RN 132558-16-8 ZCA
CN Sulfonium, [(4-ethenylphenyl)methyl] (4-hydroxyphenyl)methyl-,
(OC-6-11)-hexafluoroantimonate(1-), polymer with 1,3-butadiene and
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane
] (9CI) (CA INDEX NAME)

CM 1

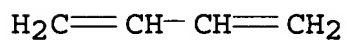
CRN 1675-54-3
CMF C21 H24 O4



CM 2

CRN 106-99-0

CMF C4 H6



CM 3

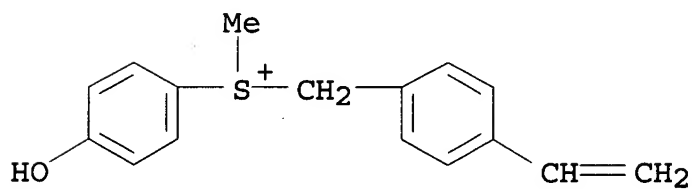
CRN 132538-49-9

CMF C16 H17 O S . F6 Sb

CM 4

CRN 132538-48-8

CMF C16 H17 O S

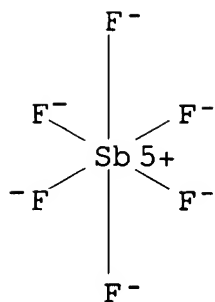


CM 5

CRN 17111-95-4

CMF F6 Sb

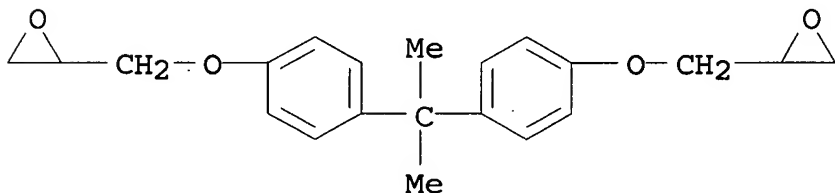
CCI CCS



RN 132558-17-9 ZCA
 CN Sulfonium, [(4-ethenylphenyl)methyl]diethyl-, (OC-6-11)-
 hexafluoroantimonate(1-), polymer with 1,3-butadiene and
 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane
] (9CI) (CA INDEX NAME)

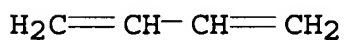
CM 1

CRN 1675-54-3
 CMF C21 H24 O4



CM 2

CRN 106-99-0
 CMF C4 H6

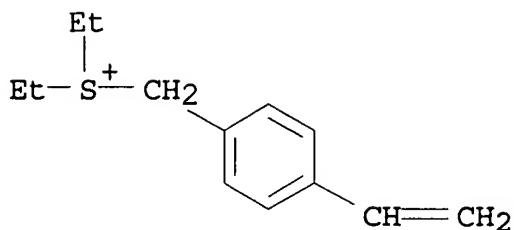


CM 3

CRN 132538-55-7
 CMF C13 H19 S . F6 Sb

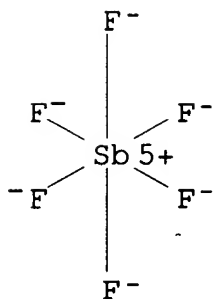
CM 4

CRN 132538-54-6
CMF C13 H19 S



CM 5

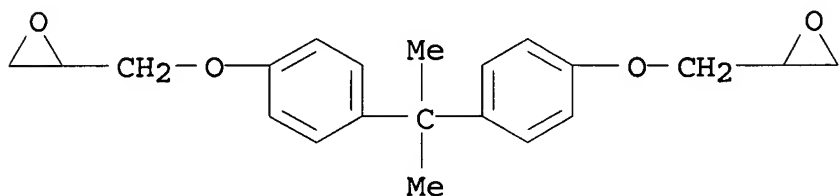
CRN 17111-95-4
CMF F6 Sb
CCI CCS



RN 132558-18-0 ZCA
CN Thiophenium, 1-[1-(4-ethenylphenyl)ethyl]tetrahydro-,
(OC-6-11)-hexafluoroantimonate(1-), polymer with 1,3-butadiene and
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]
(9CI) (CA INDEX NAME)

CM 1

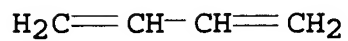
CRN 1675-54-3
CMF C21 H24 O4



CM 2

CRN 106-99-0

CMF C4 H6



CM 3

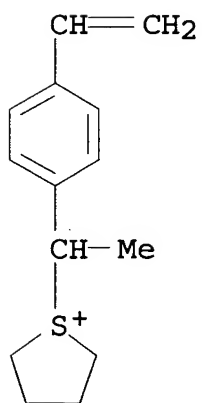
CRN 132538-58-0

CMF C14 H19 S . F6 Sb

CM 4

CRN 132538-57-9

CMF C14 H19 S

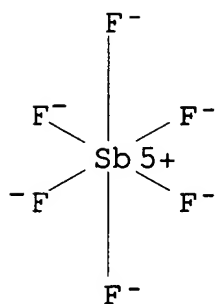


CM 5

CRN 17111-95-4

CMF F6 Sb

CCI CCS



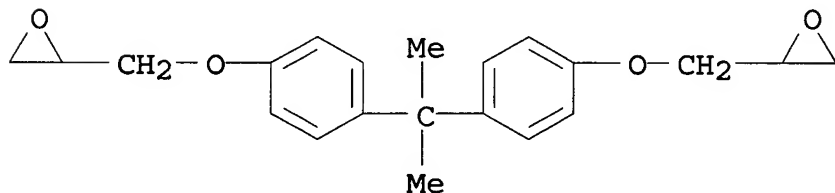
RN 132558-21-5 ZCA

CN Thiophenium, 1-[(4-ethenylphenyl)methyl]tetrahydro-,
(OC-6-11)-hexafluoroantimonate(1-), polymer with 1,3-butadiene,
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane
] and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 1675-54-3

CMF C21 H24 O4



CM 2

CRN 107-13-1

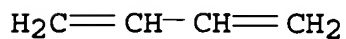
CMF C3 H3 N



CM 3

CRN 106-99-0

CMF C4 H6



CM 4

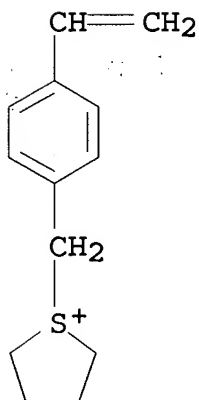
CRN 106357-94-2

CMF C13 H17 S . F6 Sb

CM 5

CRN 106311-34-6

CMF C13 H17 S

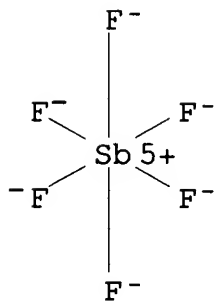


CM 6

CRN 17111-95-4

CMF F6 Sb

CCI CCS



RN 132588-30-8 ZCA

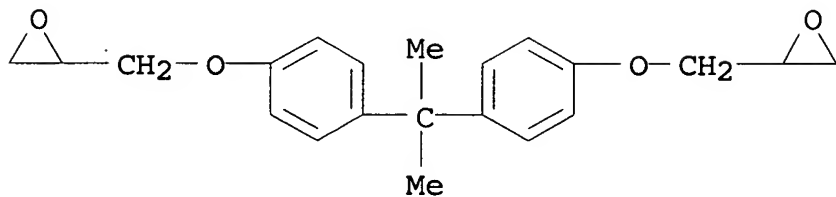
CN Thiophenium, 1-[(4-ethenylphenyl)methyl]tetrahydro-,
 (OC-6-11)-hexafluoroantimonate(1-), polymer with 1,3-butadiene and
 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]

] (9CI) (CA INDEX NAME)

CM 1

CRN 1675-54-3

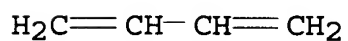
CMF C21 H24 O4



CM 2

CRN 106-99-0

CMF C4 H6



CM 3

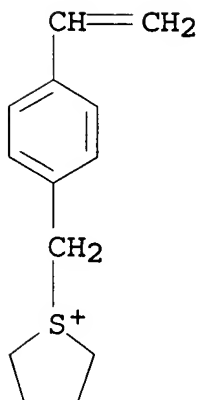
CRN 106357-94-2

CMF C13 H17 S . F6 Sb

CM 4

CRN 106311-34-6

CMF C13 H17 S

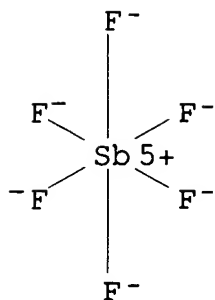


CM 5

CRN 17111-95-4

CMF F6 Sb

CCI CCS



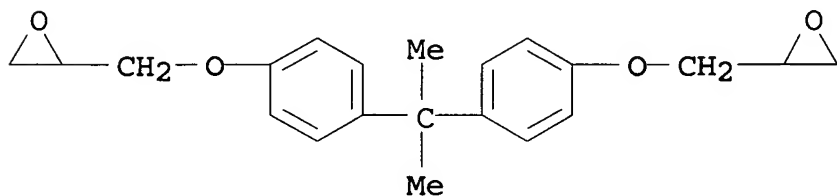
RN 132588-31-9 ZCA

CN Sulfonium, [4-(acetyloxy)phenyl][(4-ethenylphenyl)methyl]methyl-,
 (OC-6-11)-hexafluoroantimonate(1-), polymer with 1,3-butadiene and
 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]
] (9CI) (CA INDEX NAME)

CM 1

CRN 1675-54-3

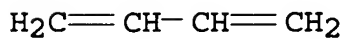
CMF C21 H24 O4



CM 2

CRN 106-99-0

CMF C4 H6



CM 3

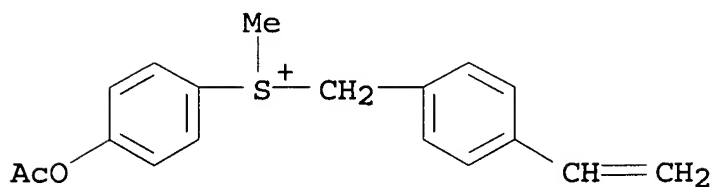
CRN 132538-52-4

CMF C18 H19 O2 S . F6 Sb

CM 4

CRN 132538-51-3

CMF C18 H19 O2 S

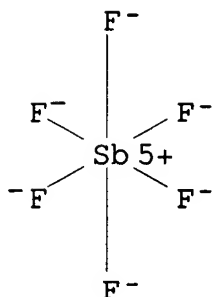


CM 5

CRN 17111-95-4

CMF F6 Sb

CCI CCS



IT 132538-47-7 132538-50-2 132538-53-5

132538-56-8 132538-59-1 132538-62-6

132558-26-0 132558-27-1 132558-28-2

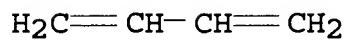
(thermosetting compns., with bisphenol A diglycidyl ether, with long pot life)

RN 132538-47-7 ZCA

CN Thiophenium, 1-[(4-ethenylphenyl)methyl]tetrahydro-,
 (OC-6-11)-hexafluoroantimonate(1-), polymer with 1,3-butadiene (9CI)
 (CA INDEX NAME)

CM 1

CRN 106-99-0
CMF C4 H6

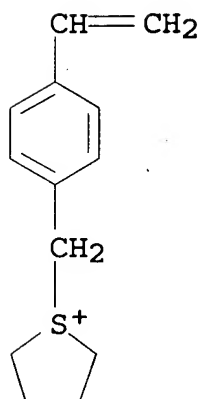


CM 2

CRN 106357-94-2
CMF C13 H17 S . F6 Sb

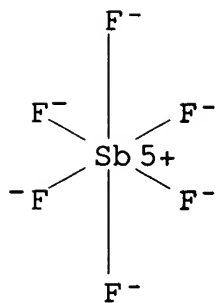
CM 3

CRN 106311-34-6
CMF C13 H17 S



CM 4

CRN 17111-95-4
CMF F6 Sb
CCI CCS

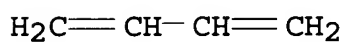


RN 132538-50-2 ZCA
CN Sulfonium, [(4-ethenylphenyl)methyl] (4-hydroxyphenyl)methyl-,
(OC-6-11)-hexafluoroantimonate(1-), polymer with 1,3-butadiene (9CI)
(CA INDEX NAME)

CM 1

CRN 106-99-0

CMF C4 H6



CM 2

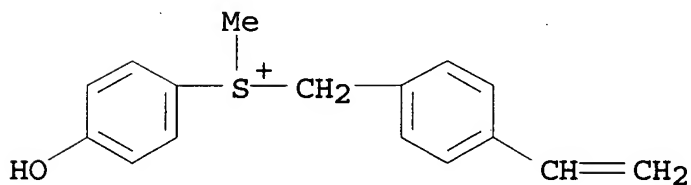
CRN 132538-49-9

CMF C16 H17 O S . F6 Sb

CM 3

CRN 132538-48-8

CMF C16 H17 O S

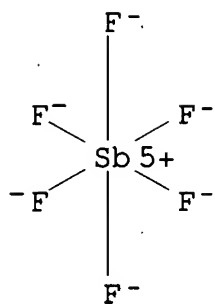


CM 4

CRN 17111-95-4

CMF F6 Sb

CCI CCS

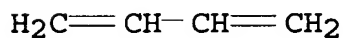


RN 132538-53-5 ZCA
 CN Sulfonium, [4-(acetyloxy)phenyl][(4-ethenylphenyl)methyl]methyl-,
 (OC-6-11)-hexafluoroantimonate(1-), polymer with 1,3-butadiene (9CI)
 (CA INDEX NAME)

CM 1

CRN 106-99-0

CMF C4 H6



CM 2

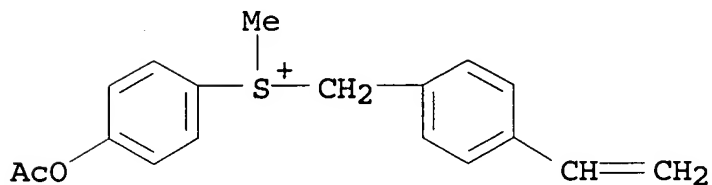
CRN 132538-52-4

CMF C18 H19 O2 S . F6 Sb

CM 3

CRN 132538-51-3

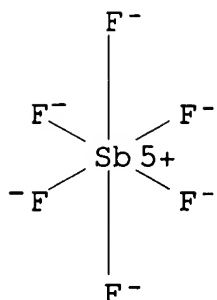
CMF C18 H19 O2 S



CM 4

CRN 17111-95-4

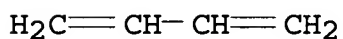
CMF F6 Sb
CCI CCS



RN 132538-56-8 ZCA
CN Sulfonium, [(4-ethenylphenyl)methyl]diethyl-, (OC-6-11)-
hexafluoroantimonate(1-), polymer with 1,3-butadiene (9CI) (CA
INDEX NAME)

CM 1

CRN 106-99-0
CMF C4 H6

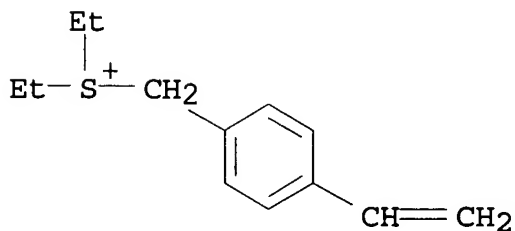


CM 2

CRN 132538-55-7
CMF C13 H19 S . F6 Sb

CM 3

CRN 132538-54-6
CMF C13 H19 S

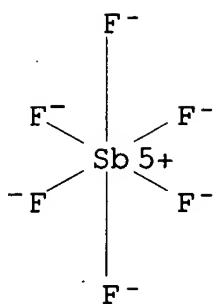


CM 4

CRN 17111-95-4

CMF F6 Sb

CCI CCS



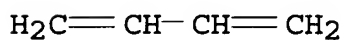
RN 132538-59-1 ZCA

CN Thiophenium, 1-[1-(4-ethenylphenyl)ethyl]tetrahydro-,
(OC-6-11)-hexafluoroantimonate(1-), polymer with 1,3-butadiene (9CI)
(CA INDEX NAME)

CM 1

CRN 106-99-0

CMF C4 H6



CM 2

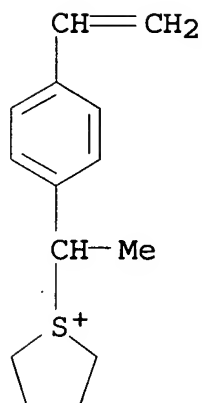
CRN 132538-58-0

CMF C14 H19 S . F6 Sb

CM 3

CRN 132538-57-9

CMF C14 H19 S

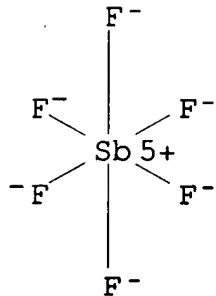


CM 4

CRN 17111-95-4

CMF F6 Sb

CCI CCS



RN 132538-62-6 ZCA

CN Thiophenium, 1-[(4-ethenylphenyl)methyl]tetrahydro-,
 (OC-6-11)-hexafluoroantimonate(1-), polymer with 1,3-butadiene and
 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

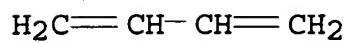
CRN 107-13-1

CMF C3 H3 N



CM 2

CRN 106-99-0
CMF C4 H6

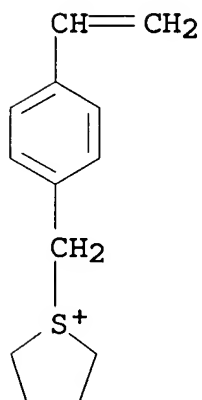


CM 3

CRN 106357-94-2
CMF C13 H17 S . F6 Sb

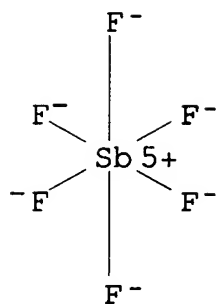
CM 4

CRN 106311-34-6
CMF C13 H17 S



CM 5

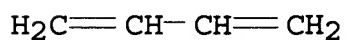
CRN 17111-95-4
CMF F6 Sb
CCI CCS



RN 132558-26-0 ZCA
 CN Thiophenium, 1-[(4-ethenylphenyl)methyl]tetrahydro-,
 tetrafluoroborate(1-), polymer with 1,3-butadiene (9CI) (CA INDEX
 NAME)

CM 1

CRN 106-99-0
 CMF C4 H6

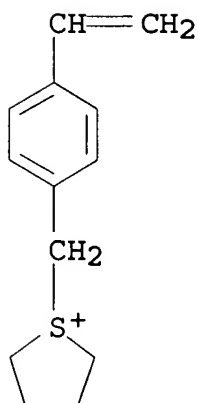


CM 2

CRN 132558-11-3
 CMF C13 H17 S . B F4

CM 3

CRN 106311-34-6
 CMF C13 H17 S

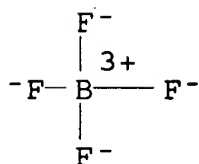


CM 4

CRN 14874-70-5

CMF B F4

CCI CCS



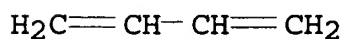
RN 132558-27-1 ZCA

CN Thiophenium, 1-[(4-ethenylphenyl)methyl]tetrahydro-,
hexafluorophosphate(1-), polymer with 1,3-butadiene (9CI) (CA INDEX
NAME)

CM 1

CRN 106-99-0

CMF C4 H6



CM 2

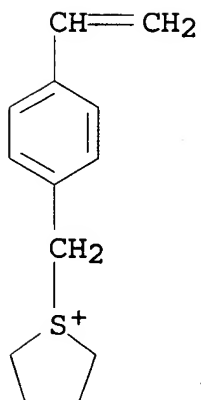
CRN 112760-73-3

CMF C13 H17 S . F6 P

CM 3

CRN 106311-34-6

CMF C13 H17 S

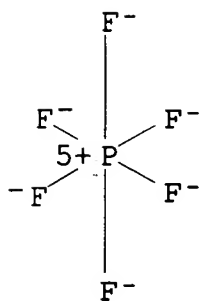


CM 4

CRN 16919-18-9

CMF F6 P

CCI CCS



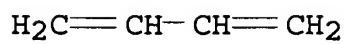
RN 132558-28-2 ZCA

CN Thiophenium, 1-[(4-ethenylphenyl)methyl]tetrahydro-,
hexafluoroarsenate(1-), polymer with 1,3-butadiene (9CI) (CA INDEX
NAME)

CM 1

CRN 106-99-0

CMF C4 H6



CM 2

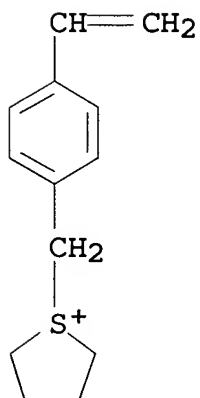
CRN 132558-14-6

CMF C13 H17 S . As F6

CM 3

CRN 106311-34-6

CMF C13 H17 S

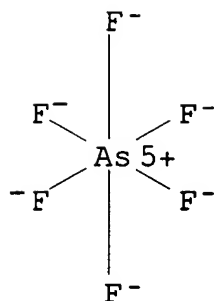


CM 4

CRN 16973-45-8

CMF As F6

CCI CCS



IT 132558-12-4 132558-13-5 132558-15-7

132558-16-8 132558-17-9 132558-18-0

132558-21-5 132588-30-8 132588-31-9

(crosslinked, solvent- and impact-resistant)

IT 132538-47-7 132538-50-2 132538-53-5

132538-56-8 132538-59-1 132538-62-6

132558-26-0 132558-27-1 132558-28-2

(thermosetting compns., with bisphenol A diglycidyl ether, with long pot life)

L35 ANSWER 13 OF 18 ZCA COPYRIGHT 2006 ACS on STN

111:78718 Synthesis and electroconductivity of poly(1,4-phenylene-1,3,5-hexatrienylene-1,4-phenylenevinylene). Jin, J. I.; Lee, Y. H.; Lee, K. S.; Kim, S. K.; Park, Y. W. (Chem. Dep., Korea Univ., Seoul, 136-701, S. Korea). Synthetic Metals, 29(1), E47-52 (English) 1989. CODEN: SYMEDZ. ISSN: 0379-6779.

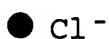
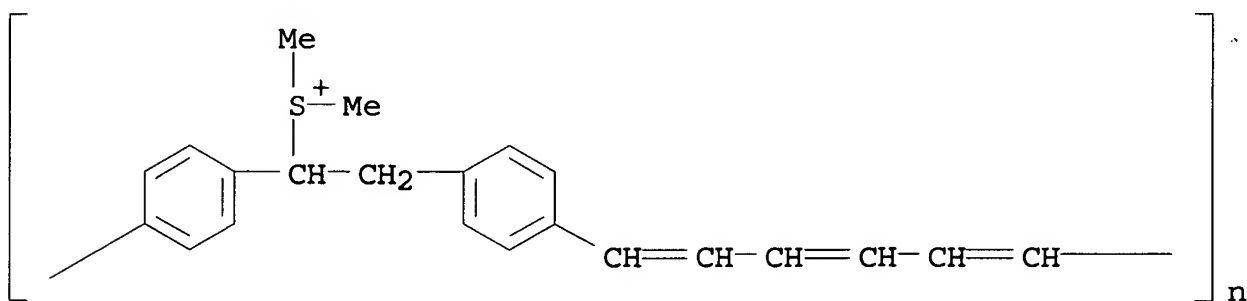
AB The title polyconjugated polymer (I) was synthesized via the sulfonium salt process from 1,6-bis[4-(chloromethyl)phenyl]-1,3,5-hexatriene. I obtained in powder form could be doped with iodine and exhibited a max. cond. of .apprx.1 .times. 10⁻³ S cm⁻¹. Compared with poly(1,4-phenylenevinylene), the presence of the longer hexatrienylene unit along the backbone improved dopability and, therefore, the elec. cond. I, when doped with H₂SO₄, exhibited a max. cond. of .apprx.2 .times. 10⁻¹ S cm⁻¹.

IT 122122-37-6P 122122-66-1P

(prepn. and dehydrochlorination and di-Me sulfide elimination of)

RN 122122-37-6 ZCA

CN Poly[1,4-phenylene[1-(dimethylsulfonio)-1,2-ethanediyl]-1,4-phenylene-1,3,5-hexatriene-1,6-diyl chloride] (9CI) (CA INDEX NAME)



RN 122122-66-1 ZCA

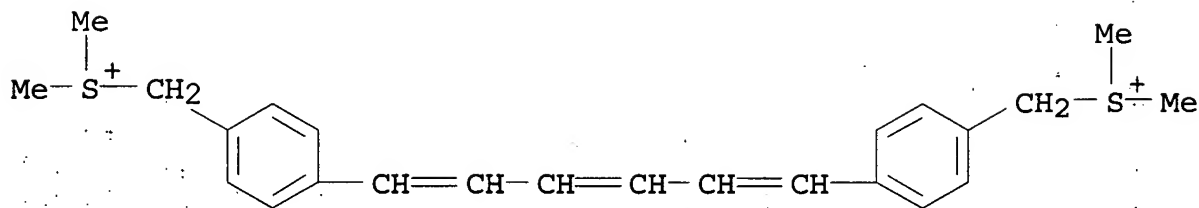
CN Sulfonium, [1,3,5-hexatriene-1,6-diylbis(4,1-phenylenemethylene)]bis[dimethyl-, dichloride, homopolymer (9CI)]

(CA INDEX NAME)

CM 1

CRN 122122-28-5

CMF C24 H30 S2 . 2 Cl

● 2 Cl⁻

IT 122122-66-1DP, di-Me sulfide elimination and dehydrochlorination products

(prepn. and elec. cond. of iodine-doped)

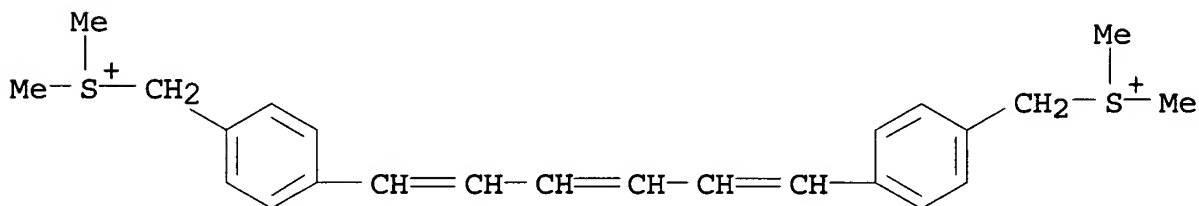
RN 122122-66-1 ZCA

CN Sulfonium, [1,3,5-hexatriene-1,6-diylbis(4,1-phenylenemethylene)]bis[dimethyl-, dichloride, homopolymer (9CI)
(CA INDEX NAME)

CM 1

CRN 122122-28-5

CMF C24 H30 S2 . 2 Cl

● 2 Cl⁻

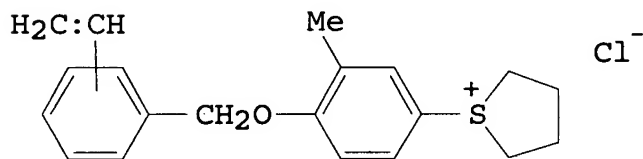
IT 122122-37-6P 122122-66-1P

(prepn. and dehydrochlorination and di-Me sulfide elimination of)

IT 122122-66-1DP, di-Me sulfide elimination and
dehydrochlorination products
(prepn. and elec. cond. of iodine-doped)

L35 ANSWER 14 OF 18 ZCA COPYRIGHT 2006 ACS on STN
104:19944 Addition-polymerizable aromatic sulfonium salts and their
polymers. Schmidt, Donald L.; Klingler, Thomas C.; Wessling,
Ritchie A. (Dow Chemical Co., USA). U.S. US 4528384 A 19850709, 12
pp. (English). CODEN: USXXAM. APPLICATION: US 1980-164744
19800630.

GI



AB Polymers with high cationic surfactant activity are prepd. from
ethylenically unsatd., arom. sulfonium salts [e.g., 1-[3-methyl-4-(vinylbenzyloxy)phenyl]tetrahydrothiophenium chloride
(I) [93926-66-0]]. The polymers having low charge d. are useful as
surfactants or emulsifiers for prepg. latex polymers, and those
having high charge d. are useful as thickeners or flocculants in
papermaking. The polymers are irreversibly converted by heating or
drying to inert, monoionic residues without the elimination of
odorous byproducts. Thus, 122.1 g 60:40 m-H2C:CHC6H4CH2Cl-p-
H2C:CHC6H4CH2Cl mixt. was heated with 92 g 2-methyl-4-
(tetrahydrothiophenium)-1-phenoxide [33127-79-6] in MeOH at
55.degree. for 4 h. Water (200 mL) was added to the reaction mixt.
and the mixt. was extd. 3 times with hexane and partially dried
under vacuum to give 324 g aq. soln. contg. 100.4 g I. A cooled
soln. contg. I 4, deionized H2O 294, styrene 65, 30% aq. H2O2 1.67,
and 0.1% aq. FeCl3 1.1 parts was mixed with 35 parts cooled
butadiene and agitated at 70.degree. for 17 h to give a clear
polymer [99581-41-6] latex (solids content 25.3%, 0.147
mequiv charge/g solids). The latex was cast on glass and dried at
110.degree. to give a water-insensitive film with no odor obsd.
during drying.

IT 93890-48-3P 93890-53-0P 93926-75-1P
93926-77-3P 93926-78-4P 93926-80-8P
93926-81-9P 93956-14-0P 99581-41-6P
(coatings, self-emulsified latex, prepn. of)

RN 93890-48-3 ZCA

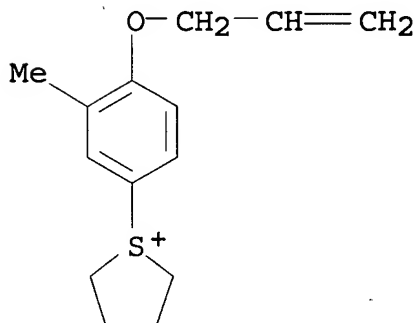
CN Thiophenium, tetrahydro-1-[3-methyl-4-(2-propenyloxy)phenyl]-,

chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 93890-47-2

CMF C14 H19 O S . Cl

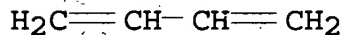


● Cl⁻

CM 2

CRN 106-99-0

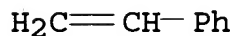
CMF C4 H6



CM 3

CRN 100-42-5

CMF C8 H8

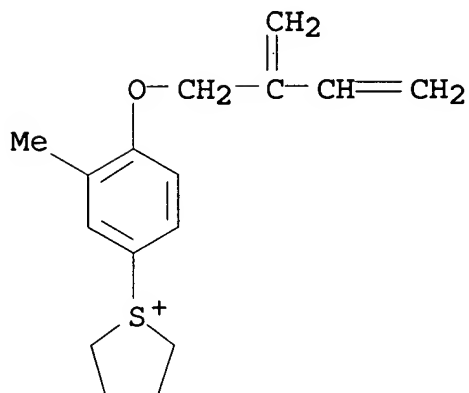


RN 93890-53-0 ZCA

CN Thiophenium, tetrahydro-1-[3-methyl-4-[(2-methylene-3-butenyl)oxy]phenyl]-, chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

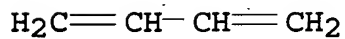
CRN 93890-52-9
CMF C16 H21 O S . Cl



● Cl⁻

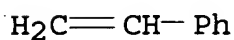
CM 2

CRN 106-99-0
CMF C4 H6



CM 3

CRN 100-42-5
CMF C8 H8

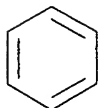


RN 93926-75-1 ZCA
CN 2H-Thiopyranium, 1-[4-[(ethenylphenyl)methoxy]phenyl]tetrahydro-, chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

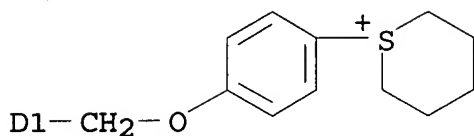
CM 1

CRN 93926-67-1

CMF C20 H23 O S . Cl
CCI IDS



D1-CH=CH₂



● Cl⁻

CM 2

CRN 106-99-0
CMF C4 H6

H₂C=CH-CH=CH₂

CM 3

CRN 100-42-5
CMF C8 H8

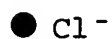
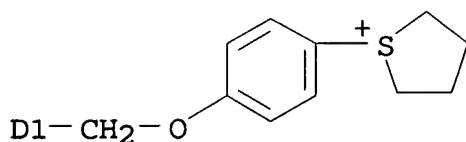
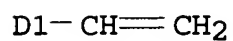
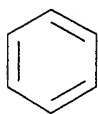
H₂C=CH-Ph

RN 93926-77-3 ZCA

CN Thiophenium, 1-[4-[(ethenylphenyl)methoxy]phenyl]tetrahydro-, chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

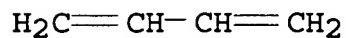
CM 1

CRN 93926-76-2
 CMF C19 H21 O S . Cl
 CCI IDS



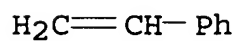
CM 2

CRN 106-99-0
 CMF C4 H6



CM 3

CRN 100-42-5
 CMF C8 H8



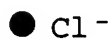
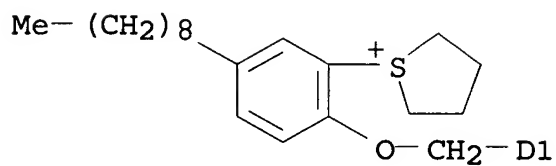
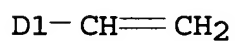
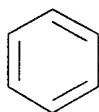
RN 93926-78-4 ZCA
 CN Thiophenium, 1-[2-[(ethenylphenyl)methoxy]-5-nonylphenyl]tetrahydro-
 , chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA
 INDEX NAME)

CM 1

CRN 93926-70-6

CMF C28 H39 O S . Cl

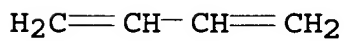
CCI IDS



CM 2

CRN 106-99-0

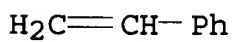
CMF C4 H6



CM 3

CRN 100-42-5

CMF C8 H8



RN 93926-80-8 ZCA

CN Sulfonium, dodecyl[4-[(ethenylphenyl)methoxy]-3-methylphenyl]methyl-, chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA

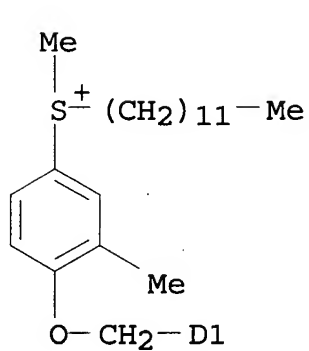
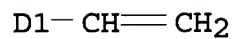
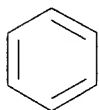
INDEX NAME)

CM 1

CRN 93926-72-8

CMF C29 H43 O S . Cl

CCI IDS

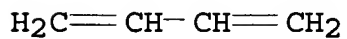


● Cl -

CM 2

CRN 106-99-0

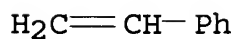
CMF C4 H6



CM 3

CRN 100-42-5

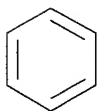
CMF C8 H8



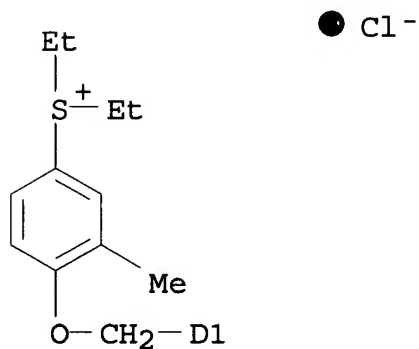
RN 93926-81-9 ZCA
 CN Sulfonium, [4-[(ethenylphenyl)methoxy]-3-methylphenyl]diethyl-,
 chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA
 INDEX NAME)

CM 1

CRN 93926-73-9
 CMF C20 H25 O S . Cl
 CCI IDS



D1-CH=CH₂



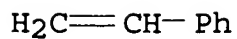
CM 2

CRN 106-99-0
 CMF C4 H6

H₂C=CH-CH=CH₂

CM 3

CRN 100-42-5
 CMF C8 H8



RN 93956-14-0 ZCA

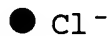
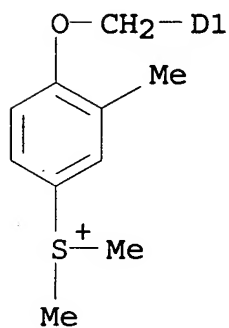
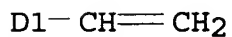
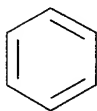
CN Sulfonium, [4-[(ethenylphenyl)methoxy]-3-methylphenyl]dimethyl-, chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 93926-71-7

CMF C18 H21 O S . Cl

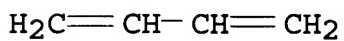
CCI IDS



CM 2

CRN 106-99-0

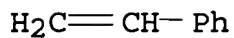
CMF C4 H6



CM 3

CRN 100-42-5

CMF C8 H8



RN 99581-41-6 ZCA

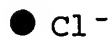
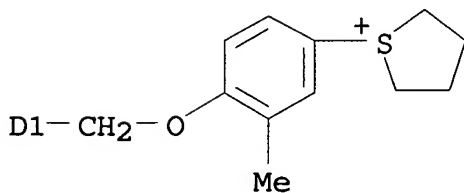
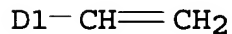
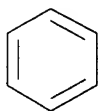
CN Thiophenium, 1-[4-[(ethenylphenyl)methoxy]-3-methylphenyl]tetrahydro-, chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 93926-66-0

CMF C20 H23 O S . Cl

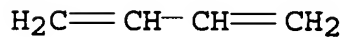
CCI IDS



CM 2

CRN 106-99-0

CMF C4 H6



CM 3

CRN 100-42-5

CMF C8 H8

 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$

IT 93890-48-3P 93890-53-0P 93926-75-1P
93926-77-3P 93926-78-4P 93926-80-8P
93926-81-9P 93956-14-0P 99581-41-6P
(coatings, self-emulsified latex, prepn. of)

L35 ANSWER 15 OF 18 ZCA COPYRIGHT 2006 ACS on STN
102:26478 Addition polymerizable aromatic sulfonium salts and their
polymers. Schmidt, Donald L.; Klingler, Thomas C.; Wessling,
Ritchie A. (Dow Chemical Co., USA). U.S. US 4477640 A 19841016, 12
pp. Division of U.S. Ser. No. 164,744. (English). CODEN: USXXAM.
APPLICATION: US 1982-422775 19820924. PRIORITY: US 1980-164744
19800630.

AB Water-sol., addn. polymerizable, ethylenically unsatd. arom.
sulfonium salts are prepd., and their polymers are useful as
surfactants in vinyl coatings. Thus, 122.1 g vinylbenzyl chloride
[30030-25-2] was treated with 92 g 2-methyl-4-tetrahydrothiophenium
phen-1-oxide dihydrate in 118.8 g MeOH and heated 4 h at 55.degree.
to give 100.4 g vinylbenzyloxy-4-(2-methylphenyl)tetrahydrothiopheni-
um chloride (I) [93926-66-0]. A mixt. contg. I 4, water 294,
styrene 65, 30% H2O2 1.67, and 0.1% FeCl3.6H2O 1.1 parts was mixed
with 35 parts cooled butadiene and heated 17 h at 70.degree. to give
a clear liq. latex having 25.3% solids, no waste, and 0.147 mequiv
charge/g solids. The latex was cast on glass and dried at
110.degree. to give a water-insensitive coating having no odor
during drying.

IT 93890-48-3 93890-53-0 93926-75-1
93926-77-3 93926-78-4 93926-80-8
93926-81-9 93956-14-0 93977-33-4
(coatings, water-insensitive)

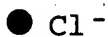
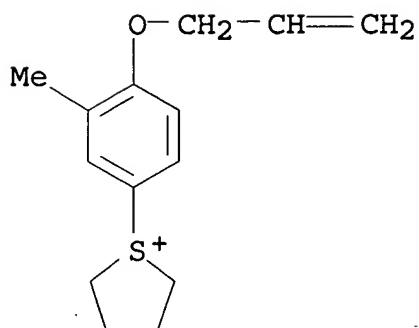
RN 93890-48-3 ZCA

CN Thiophenium, tetrahydro-1-[3-methyl-4-(2-propenyloxy)phenyl]-,
chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA
INDEX NAME)

CM 1

CRN 93890-47-2

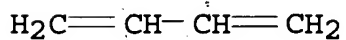
CMF C14 H19 O S . Cl



CM 2

CRN 106-99-0

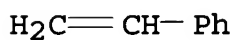
CMF C4 H6



CM 3

CRN 100-42-5

CMF C8 H8



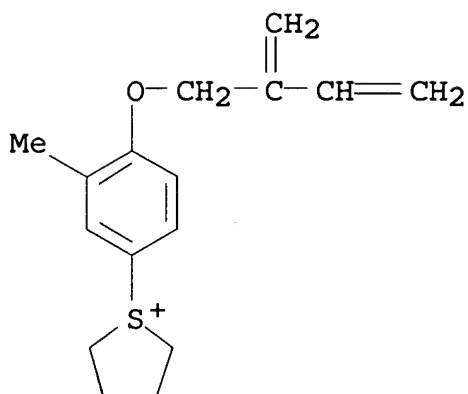
RN 93890-53-0 ZCA

CN Thiophenium, tetrahydro-1-[3-methyl-4-[(2-methylene-3-butenyl)oxy]phenyl]-, chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 93890-52-9

CMF C16 H21 O S . Cl

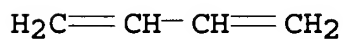


● Cl⁻

CM 2

CRN 106-99-0

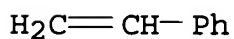
CMF C4 H6



CM 3

CRN 100-42-5

CMF C8 H8



RN 93926-75-1 ZCA

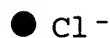
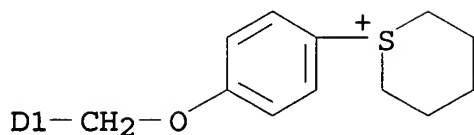
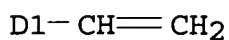
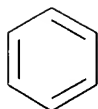
CN 2H-Thiopyranium, 1-[4-[(ethenylphenyl)methoxy]phenyl]tetrahydro-, chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 93926-67-1

CMF C20 H23 O S . Cl

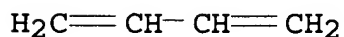
CCI IDS



CM 2

CRN 106-99-0

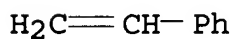
CMF C4 H6



CM 3

CRN 100-42-5

CMF C8 H8



RN 93926-77-3 ZCA

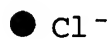
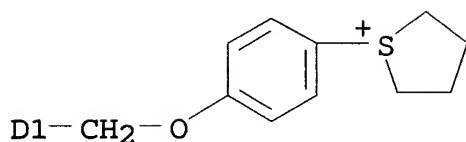
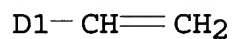
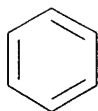
CN Thiophenium, 1-[4-[(ethenylphenyl)methoxy]phenyl]tetrahydro-,
chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA
INDEX NAME)

CM 1

CRN 93926-76-2

CMF C19 H21 O S . Cl

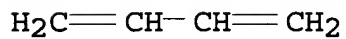
CCI IDS



CM 2

CRN 106-99-0

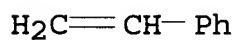
CMF C4 H6



CM 3

CRN 100-42-5

CMF C8 H8



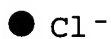
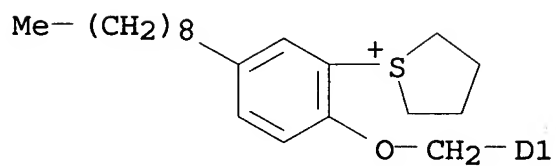
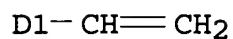
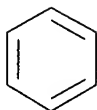
RN 93926-78-4 ZCA

CN Thiophenium, 1-[2-[(ethenylphenyl)methoxy]-5-nonylphenyl]tetrahydro-, chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 93926-70-6

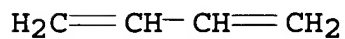
CMF C28 H39 O S . Cl
CCI IDS



CM 2

CRN 106-99-0

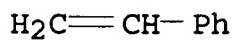
CMF C4 H6



CM 3

CRN 100-42-5

CMF C8 H8

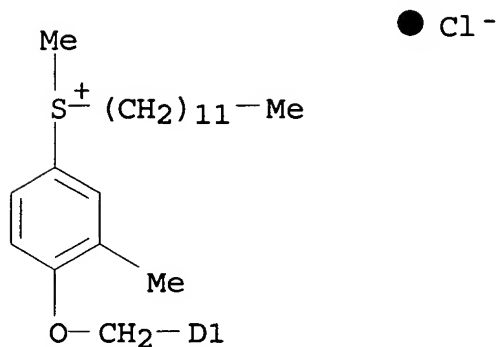
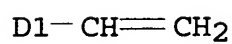
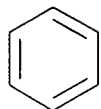


RN 93926-80-8 ZCA

CN Sulfonium, dodecyl[4-[(ethenylphenyl)methoxy]-3-methylphenyl]methyl-, chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

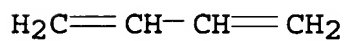
CM 1

CRN 93926-72-8
 CMF C29 H43 O S . Cl
 CCI IDS



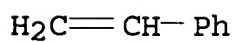
CM 2

CRN 106-99-0
 CMF C4 H6



CM 3

CRN 100-42-5
 CMF C8 H8



RN 93926-81-9 ZCA
 CN Sulfonium, [4-[(ethenylphenyl)methoxy]-3-methylphenyl]diethyl-, chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA

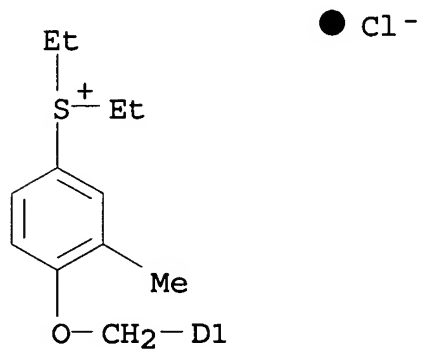
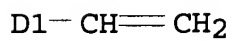
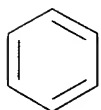
INDEX NAME)

CM 1

CRN 93926-73-9

CMF C20 H25 O S . Cl

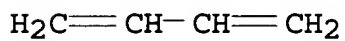
CCI IDS



CM 2

CRN 106-99-0

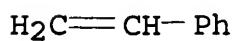
CMF C4 H6



CM 3

CRN 100-42-5

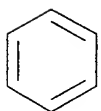
CMF C8 H8



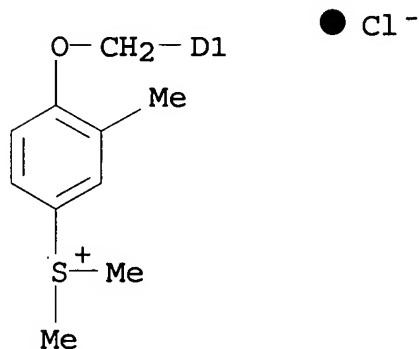
RN 93956-14-0 ZCA
 CN Sulfonium, [4-[(ethenylphenyl)methoxy]-3-methylphenyl]dimethyl-,
 chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA
 INDEX NAME)

CM 1

CRN 93926-71-7
 CMF C18 H21 O S . Cl
 CCI IDS



D1-CH=CH₂



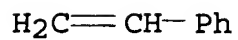
CM 2

CRN 106-99-0
 CMF C4 H6

H₂C=CH-CH=CH₂

CM 3

CRN 100-42-5
 CMF C8 H8



RN 93977-33-4 ZCA

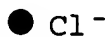
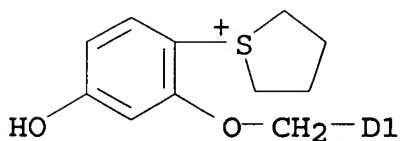
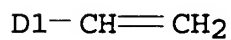
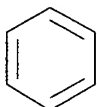
CN Thiophenium, 1-[2-[(ethenylphenyl)methoxy]-4-hydroxyphenyl]tetrahydro-, chloride, polymer with 1,3-butadiene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 93926-69-3

CMF C19 H21 O2 S . Cl

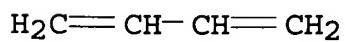
CCI IDS



CM 2

CRN 106-99-0

CMF C4 H6



CM 3

CRN 100-42-5
CMF C8 H8

$\text{H}_2\text{C}=\text{CH}-\text{Ph}$

IT 93890-48-3 93890-53-0 93926-75-1
93926-77-3 93926-78-4 93926-80-8
93926-81-9 93956-14-0 93977-33-4
(coatings, water-insensitive)

L35 ANSWER 16 OF 18 ZCA COPYRIGHT 2006 ACS on STN
92:60725 High strength composite and fibrous web comprising a dried composite. Pickelman, Dale Martin; Foster, William Albert; Wessling, Ritchie Antone (Dow Chemical Co., USA). Eur. Pat. Appl. EP 921 19790307, 42 pp. (English). CODEN: EPXXDW. APPLICATION: EP 1978-100676 19780816.

AB Addn. of styrene copolymers encapsulated with quaternary or sulfonium group-contg. vinyl compd. polymers and acrylic resin or hydrolyzed polyacrylamide (I) to cellulose pulp gave paper with improved strength properties. Thus, mech. pulp slurry of 1% consistency was treated with I 0.8, alum 2, and butadiene-styrene copolymer [9003-55-8] encapsulated with 2-(dimethylamino)ethanol-quaternized butadiene-styrene-vinylbenzyl chloride copolymer (particle size 1290 .ANG.) 5%, formed into handsheet, dried for 5 min at 165.degree., and conditioned for 2 h at 23.degree. and 50% relative humidity to give a specimen with 762 m breaking length. The effluent from sheet formation had clarity of 94%.

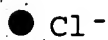
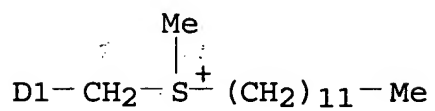
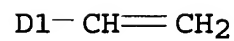
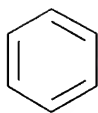
IT 72497-57-5
(paper contg., with improved strength properties)

RN 72497-57-5 ZCA

CN Sulfonium, dodecyl[(ethenylphenyl)methyl]methyl-, polymer with 1,3-butadiene, ethenylbenzene and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 72497-56-4
CMF C22 H37 S . Cl
CCI IDS



CM 2

CRN 107-13-1

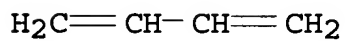
CMF C3 H3 N



CM 3

CRN 106-99-0

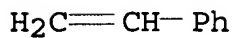
CMF C4 H6



CM 4

CRN 100-42-5

CMF C8 H8



IT 72497-57-5

(paper contg., with improved strength properties)

L35 ANSWER 17 OF 18 ZCA COPYRIGHT 2006 ACS on STN

78:45201 Aqueous acrylic copolymer dispersions. Gibbs, Dale Sabin; Wagener, Earl Henry; Wessling, Ritchie Antone (Dow Chemical Co.). Ger. Offen. DE 2220823 19721116, 20 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1972-2220823 19720427.

AB The stable aq. copolymer dispersions, which were used in coating of, e.g., steel [12597-69-2] by electrodeposition, were prep'd. by copolymn. of hydrophobic vinyl monomers with small amts. of H₂O-sol. benzyldimethylsulfonium chlorides. Thus, 30% H₂O₂ 5, FeCl₃·6H₂O 0.0039, H₂O (pH 2.5, with HCl) 100, (vinylbenzyl)dimethylsulfonium chloride 0.7, vinylbenzyl chloride 8, styrene 24, and Bu acrylate 48 parts were heated 25 hr at 70.deg. to give a stable 42.5% Bu acrylate-styrene-vinylbenzyl chloride-(vinylbenzyl)dimethylsulfonium chloride copolymer [37260-12-1] latex.

IT 39288-27-2 40526-29-2
(coatings, electrophoretic)

RN 39288-27-2 ZCA

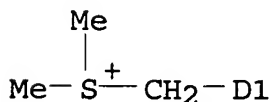
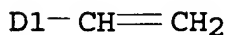
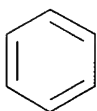
CN Sulfonium, [(ethenylphenyl)methyl]dimethyl-, chloride, polymer with 1,3-butadiene, ethenylbenzene and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 29562-34-3

CMF C11 H15 S . Cl

CCI IDS



CM 2

CRN 107-13-1

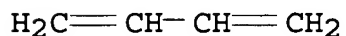
CMF C3 H3 N



CM 3

CRN 106-99-0

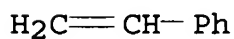
CMF C4 H6



CM 4

CRN 100-42-5

CMF C8 H8



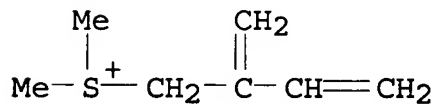
RN 40526-29-2 ZCA

CN Sulfonium, dimethyl(2-methylene-3-butenyl)-, chloride, polymer with butyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

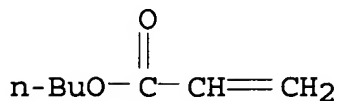
CRN 25149-22-8

CMF C7 H13 S . Cl

● Cl⁻

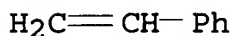
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 100-42-5
CMF C8 H8



IT 39288-27-2 40526-29-2
(coatings, electrophoretic)

L35 ANSWER 18 OF 18 ZCA COPYRIGHT 2006 ACS on STN

66:3274 Anion-exchange resins in the class of onium compounds.
Trostyanskaya, E. B.; Makarova, S. B. Zhurnal Prikladnoi Khimii
(Sankt-Peterburg, Russian Federation), 39(8), 1754-60 (Russian)
1966. CODEN: ZPKHAB. ISSN: 0044-4618.

AB Several quaternary ammonium, phosphonium, and sulfonium
anion-exchange resins were obtained and their physico-chem.
characteristics given. Potentiometric titrn. curves, apparent
dissozn. consts., thermal stabilities, swelling properties, and ion
exchange equil. consts. for SO₄-2 /Cl-, SO₄-2 /Br-, SO₄-2 /I-,
Cl-/NO₃, and Cl-/AcO- exchange are detd. and discussed.

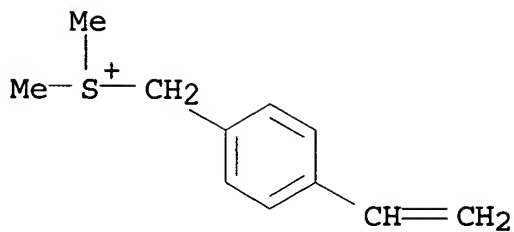
IT 31288-87-6, properties 31288-88-7, properties
(anion-exchanging)

RN 31288-87-6 ZCA

CN Sulfonium, dimethyl(p-vinylbenzyl)-, chloride, polymer with
1,3-butadiene (8CI) (CA INDEX NAME)

CM 1

CRN 48130-50-3
CMF C11 H15 S . Cl

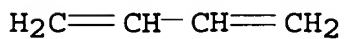


● Cl⁻

CM 2

CRN 106-99-0

CMF C4 H6



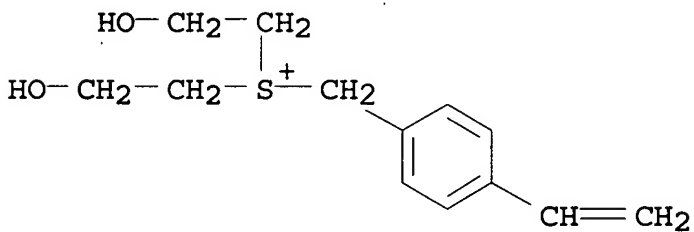
RN 31288-88-7 ZCA

CN Sulfonium, bis(2-hydroxyethyl)(p-vinylbenzyl)-, chloride, polymer with 1,3-butadiene (8CI) (CA INDEX NAME)

CM 1

CRN 25591-76-8

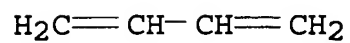
CMF C13 H19 O2 S . Cl



● Cl⁻

CM 2

CRN 106-99-0
CMF C4 H6



IT 31288-87-6, properties 31288-88-7, properties
(anion-exchanging)